NEW GENERA AND SPECIES OF SOUTHERN SOUTH AMERICAN PHYCITINAE (LEPIDOPTERA: PYRALIDAE)

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Abstract. – Six new genera of phycitine moths from southern South America are described. They are Cabimoides n. gen. with C. patagoniensis n. sp., Apocabimoides n. gen. with A. neuquenensis n. sp., Inverina n. gen. with I. suizensis n. sp., Ohigginsia n. gen. with O. diversa n. sp., Pseudopassadena n. gen. with P. gentilii n. sp., Eupassadena n. gen. with E. karsholti n. sp. Also described from this region are the following new species: Ectomyelois austrella n. sp., Pseudocabima australis n. sp., Ephestiodes argentinus n. sp., Erelieva steppeiana n. sp., Homoeosoma strongylognathosum n. sp., Homoeosoma eurygnathosum n. sp., Homoeosoma pauroaichmetes n. sp., Ragonotia confluenciana n. sp., Passadena argentina n. sp., Honora nirihuauensis n. sp., Honora palliolella n. sp., Ocala megajuxta n. sp.

Key Words: Moths, phycitines, southern Argentina, southern Chile, Patagonia

The phycitine fauna of southern South America, particularly that part of Argentina and Chile known as Patagonia, is not well known. Heinrich (1956) brought together existing information and listed 33 species from Argentina and Chile in his checklist. Pastrana (1961a, b) provided information on two additional species which appear to be restricted to the northern part of Argentina and to Uruguay.

Our paper is based on phycitine moths in the Zoological Museum of the University of Copenhagen (ZMUC) collected in 1950, 1952, 1960, 1961, 1966, 1978–79, and 1981 in southern South America in the provinces of Chubut, Neuquén, Rio Negro, and Santa Cruz in Argentina, and Orsono in Chile. Chubut, Rio Negro and Santa Cruz are Patagonian provinces; Neuquén and Orsono are adjacent to northern Patagonia. Entomologists participating in the 1978–79 Mision Cientifica Danesa light trapped the majority of the study material. Nielsen (1980) provided information on this expedition, including notes on the dominant vegetation at the various collecting sites. Where possible, we have included this ecological information under each species.

> *Ectomyelois austrella* Neunzig and Goodson, NEW SPECIES Figs. 1, 32, 33, 68

Type locality.—San Carlos de Bariloche, Colonia Suiza, 810 m, Rio Negro Province, Argentina.

Diagnosis. — The male genitalia (Figs. 32, 33) of *E. austrella* are easily recognized by the unusually broad bases of the gnathos, the peculiar inner, basal protuberance on the valva, and the enlarged anterior part of the aedoeagus. In the female genitalia (Fig. 68) the broadly V-shaped, irregularly margined, sclerotized plate near the genital

opening, and the narrowly and deeply invaginated signum in the corpus bursae are diagnostic.

Description.-Length of forewing: 9.5-10.5 mm. Head with front and vertex fuscous, or black, and white; antenna simple in both sexes; labial palpus white and fuscous, or white and black, basal segment mostly white, distal segments mostly fuscous, or black, upturned in both sexes; maxillary palpus fuscous, or black, and white, simple in both sexes. Thorax with dorsum white, ochre, fuscous, black, brown and reddish brown: collar similar to dorsum. Forewing with ground color fuscous; white patch at base; ochre to reddish brown patch along subbasal posterior margin; antemedial line well developed, white, distinctively bordered on distal margin with black; postmedial line white, well developed, bordered proximally with black, and bordered distally, over most of its length, with brownish red: a few brownish red scales mixed with black scales of patch distad of antemedial line, and brownish red and ochre scales in posterior medial area; white dusting subbasally, medially (particularly in costal half), and in terminal area; discal spots black, well developed, fused; underside, of male, without costal fold or sex-scaling. *Hindwing* pale fuscous, darker along veins and near costal and outer margins. Male abdominal seg*ment* 8 with pair of ventrolateral scale tufts; each tuft composed of slender, approximately straight, scales. Male genitalia (Figs. 32, 33) with uncus broadly triangular, apex rounded; gnathos with apical process slightly notched, and lateral, basal arms robust; transtilla complete, well sclerotized, and produced mesially into flat, broadly and bluntly pointed projection; juxta U-shaped with moderately robust, setiferous lateral arms; valva with costa broadly sclerotized, and with inner basal, setiferous protuberance; vinculum longer than greatest width; aedoeagus apically enlarged and with small cluster of scobinations. Female genitalia (Fig. 68) with ductus bursae short and with broadly V-shaped, irregularly margined sclerotized plate near genital opening and dense patch of scobinations where it joins corpus bursae; corpus bursae elongate, membranous, with narrowly and deeply invaginate scobinate signum, and additional scobinations near signum; ductus seminalis attached to corpus bursae near junction of ductus bursae and corpus bursae.

Distribution.—Southwestern Rio Negro Province, Argentina. *Ectomyelois austrella* occurs in forests dominated by *Nothofagus dombeyi* Blume.

Holotype.-ô-San Carlos de Bariloche, Colonia Suiza, 810 m. Rio Negro Province, Argentina, 15 Jan 1979, Mision Científica Danesa, genitalia slide 2996 HHN (ZMUC).

Paratypes. – Argentina. Rio Negro Prov.: Lago Nahuel Huapí, Puerto Blest, 770 m, 1 ô, 5 Jan 1979, Mision Cientifica Danesa, genitalia slide 2986 HHN. Bariloche and environs, 1 º, 1 Mar 1966, Axel M. Hemingsen, genitalia slide 2997 HHN. El Bolsón, Arroyo Negro, 1 Mar 1961, Gy. Topál, genitalia slide 3071 HHN. Paratypes in ZMUC.

> Pseudocabima australis Neunzig and Goodson, New Species Figs. 2, 34, 35, 71

Type locality.—Rio Limay, Arroyito, Neuquén Province, Argentina.

Diagnosis.—Similar to *Pseudocabima* perrensiella (Ragonot) which also occurs in Argentina, but *P. australis* has the forewing with the antemedial and postmedial lines equally distinct, and the postmedial line strongly dentate; in *P. perrensiella* the antemedial line is very weak (appears to be absent in Ragonot's 1893 fig. 11, Plate V) and the postmedial line is weakly dentate. Also, *P. australis* has the ductus bursae of the female genitalia (Fig. 71) membranous and only slightly bent in its anterior half, whereas *P. perrensiella* has a partially sclerotized, strong bend in the ductus bursae in its anterior half.

Description.-Length of forewing: 11.0-14.0 mm. Head with front and vertex with white-tipped fuscous scales; antenna of male simple with sensilla trichodea about as long as diameter of shaft near base; antenna of female with sensilla trichodea about 1/4 as long as diameter of shaft near base and each segment of shaft with slightly longer, slender, spinelike sensilla: labial palpus white at base, with white-tipped fuscous scales distally, upturned in male, somewhat porrect in female; maxillary palpus with whitetipped fuscous scales, simple in both sexes. Thorax with dorsum mostly white or brownish white with some white-tipped fuscous scales; collar with white-tipped fuscous scales; prothoracic scale tuft present, extending dorsally to partially cover eye in both sexes. Forewing with ground color fuscous, most of wing dusted with white, particularly along subbasal costal margin and in terminal area; antemedial line moderately distinct, bordered distally by black; postmedial line moderately distinct, strongly dentate, bordered proximally by black (black borders in medial area, in conjunction with less white dusting in this area, give wing a somewhat banded appearance); some obscure, pale brown, or pale reddish brown scales, particularly in posterior half; discal spots black, fused, relatively distinct in male, obscure in female; underside, of male, with small narrow costal fold. Hindwing smoky white, slightly darker near costal and outer margins. Male abdominal segment 8 with pair of ventrolateral scale tufts; each tuft a cluster of simple, approximately straight scales. Male genitalia (Figs. 34, 35) with uncus spoon-shaped; gnathos with apical element strongly bifurcate; transtilla weakly developed; juxta a short plate with setiferous lateral lobes; valva simple; vinculum slightly longer than greatest width, strongly constricted towards anterior margin; aedoeagus simple, robust basally. Female genitalia (Fig. 71) with ductus bursae membranous, wrinkled and scobinate near junction with corpus bursae; corpus bursae membranous with many, generally distributed scobinations; signum an elongate, fused cluster of weakly sclerotized, mostly blunt, flattened, toothlike platelets; ductus seminalis attached to corpus bursae near junction of ductus bursae and corpus bursae.

Distribution.—Southeastern Neuquén Province, Argentina. Collected at sites having vegetation transitional between bush steppe and Patagonian steppe.

Holotype. – *č* – Rio Limay, Arroyito, Neuquén Province, Argentina, 16 Dec 1978, genitalia slide 2894 HHN (ZMUC).

Paratypes. – Argentina. Neuquén Prov.: Piedra del Aquila, 1 δ , 23 Dec 1978, Mision Cientifica Danesa, genitalia slide 2934 HHN. Rio Limay, Arroyito, 1 δ , 16 Nov 1978; 1 δ , 1 \circ , 17 Nov 1978; 2 δ , 16 Dec 1978, Mision Cientifica Danesa, 1 δ , 1 \circ genitalia slides 2957, 2935 HHN. Paratypes in ZMUC.

Discussion.—An additional reason for believing *P. australis* is distinct from *P. perrensiella* is that *P. perrensiella* was collected at Goya, Corrientes Province, in northern Argentina (Ragonot 1888, 1893), near the Paraná River. According to Weber (1969), vegetation in this region consists of subtropical forest, an environment quite different from the bush and Patagonian steppe where *P. australis* occurs.

Cabimoides Neunzig and Goodson, New Genus

Gender.-Masculine.

Type species.—*Cabimoides patagonien*sis Neunzig and Goodson.

Antenna (Fig. 30) simple in both sexes; sensilla trichodea of shaft of male moderately abundant and about ²/₃ as long as basal diameter of shaft. Front convex, smoothly scaled. Labial palpus of both sexes upturned. Maxillary palpus simple in both sexes. Haustellum very weakly developed. Ocellus absent. Prothoracic scale tuft extending dorsally to partially cover eye in both sexes. Basal ¹/₂ of costa of forewing of male (Fig. 19) slightly convex to straight;

underside of male without costal fold or sexscaling. Forewing without raised scales; with 11 veins; R_2 separated from R_{3+4} and R_5 at base; R_{3+4} and R_5 stalked for slightly over $\frac{1}{2}$ their lengths; M₁ straight; M₂ and M₃ stalked for about ¹/₄ their lengths; CuA₁ from lower angle of cell; CuA₂ from before lower angle of cell. Hindwing (Fig. 19) with 8 veins (1A, 2A, and 3A considered to be 1 vein); Sc + R_1 and R_s fused for about $\frac{1}{2}$ their lengths beyond cell; M₁ from upper angle of cell; M_2 and M_3 fused for about $\frac{1}{2}$ their lengths; CuA₁ shortly fused with $M_2 + M_3$ at base; CuA₂ from well before lower angle of cell; cell slightly over 1/2 length of wing. Eighth abdominal segment of male with pair of ventral scale tufts; tufts rather short and narrow, composed of thin, approximately straight, scales. Male genitalia (Figs. 38, 39) with uncus rather broad, terminal margin concave; gnathos with apex strongly bifurcate; transtilla very weak, incomplete mesially; juxta with robust setiferous lateral lobes; valva simple; aedoeagus robust, simple; vinculum shorter than greatest width, with small lateral protuberance. Female genitalia (Fig. 70) with ductus bursae membranous and shorter than corpus bursae; corpus bursae membranous, weakly scobinate; signum a comblike plate; ductus seminalis attached to corpus bursae about halfway between signum and junction of ductus bursae and corpus bursae.

Cabimoides is closely related to *Apocabimoides* based on similar, simple antennae and palpi, a reduced haustellum, absence of ocelli, and similar genitalia. The genera are easily separated from each other on the basis of wing venation. *Cabimoides* has 8 veins in the hindwing (Fig. 19) whereas *Apocabimoides* has 7 veins in the hindwing (Fig. 20). The appearance of the genitalia of both *Cabimoides* and *Apocabimoides* suggests an affinity to *Diatomocera* Ragonot and *Pseudocabima* Heinrich, but, most noticeably, *Cabimoides* and *Apocabimoides* lack the spoon-shaped uncus of the male genitalia so characteristic of the Ragonot and Heinrich genera.

Cabimoides patagoniensis Neunzig and Goodson, NEW SPECIES Figs. 3, 19, 30, 38, 39, 70

Type locality.—Norquincó, Rio Negro Province, Argentina.

Diagnosis.—The male and female genitalia as shown in Figs. 38, 39, 70, and outlined in the description of the genus are diagnostic for *C. patagoniensis*.

Description.-Length of forewing: 9.0-11.5 mm. Head with front brown, dusted with white; vertex similar to front, but whiter; labial palpus white at base, becoming brown to fuscous distally; maxillary palpus mostly white with few brown scales. Thorax with dorsum and collar a mixture of brown, or fuscous, and white; tegulae brownish white distally. Forewing with ground color fuscous, rather heavily dusted with white; antemedial line angular, pale yellowish or brownish white, bordered proximally and distally by fuscous; postmedial line also, at least in part, pale yellowish or brownish white, bordered proximally by fuscous; discal spots fuscous, moderately distinct, separate. Hindwing smoky fuscous, darker along veins and near costal and outer margins. Male and female genitalia (Figs. 38, 39, 70) as in description of genus.

Distribution.—Southwestern Rio Negro Province and northeastern Santa Cruz Province, Argentina.

Holotype. – ð – Norquincó, Rio Negro Province, Argentina, 21 Jan 1961, Gy. Topál, genitalia slide 2993 HHN (ZMUC).

Paratypes. – Argentina. Rio Negro Prov.: Ñorquincó, 1 &, 21 Jan 1961; 3 &, 18 Feb 1961; 1 º, 19 Feb 1961, Gy. Topál, 2 &, 1 º, genitalia slides 2971, 2972, 3000 HHN. Santa Cruz Prov.: Fitz Roy, Tres Cerros, 1 &, 10 Feb 1979, Mision Cientifica Danesa, genitalia slide 3048 HHN. Paratypes in ZMUC.

Apocabimoides Neunzig and Goodson, New Genus

Gender.-Masculine.

Type species.—*Apocabimoides neuquenensis* Neunzig and Goodson.

Antenna (Fig. 27) simple in both sexes; sensilla trichodea about 1/2 as long as basal diameter of shaft. Front convex, smoothly scaled. Labial palpus of both sexes upturned. Maxillary palpus simple in both sexes. Haustellum much reduced. Ocellus absent. Prothoracic scale tuft extending dorsally to partially cover eye in both sexes. Basal ¹/₂ of costa of forewing of male (Fig. 20) slightly convex to straight; underside, of male, without costal fold or sex-scaling. Forewing without raised scales; with 11 veins; R_2 separated from R_{3+4} and R_5 at base; R_{3+4} and R_5 stalked for slightly over $\frac{1}{2}$ their lengths; M₁ straight; M₂ and M₃ stalked for about 1/4 their lengths; CuA1 from lower angle of cell; CuA, from well before lower angle of cell. Hindwing (Fig. 20) with 7 veins; Sc + R_1 and R_s fused for about $\frac{1}{2}$ their lengths beyond cell; M₁ from upper angle of cell; M₂ and M₃ completely fused; CuA_1 slightly fused with $M_2 + M_3$ at base; CuA₂ from well before lower angle of cell; cell slightly over 1/2 length of wing. Eighth abdominal segment of male with pair of ventral scale tufts; tufts rather short and narrow, composed of thin, more or less straight, scales. Male genitalia (Figs. 36, 37) with uncus broadly rounded at apex; gnathos with apex bifurcate; transtilla weakly formed, incomplete mesially; juxta with robust, setiferous lateral lobes; valva simple; aedoeagus robust, simple; vinculum shorter than greatest width, with small lateral protuberances. Female genitalia (Fig. 72) with ductus bursae membranous and about as long as corpus bursae; corpus bursae membranous, scobinate; signum an elongate, slightly arched, sclerotized band of fused spines; ductus seminalis attached to corpus bursae near signum.

Apocabimoides appears to be derived from Cabimoides, or an ancestor similar to Cabimoides. As mentioned under Cabimoides, the two genera have many similar morphological features, however, Apocabimoides has fewer veins in the hindwing.

Apocabimoides neuquenensis Neunzig and Goodson, NEW SPECIES Figs. 4, 20, 27, 36, 37, 72

Type locality.—Piedra del Aguila, Neuquén Province, Argentina.

Diagnosis.—The male and female genitalia as shown in Figs. 36, 37, 72, and outlined in the description of the genus are diagnostic for *A. neuquenensis*. *A. neuquenensis* differs from the related *Cabimoides patagoniensis* in being smaller, having fewer veins in the hindwing, and having the antemedial line evenly curved (angular in *C. patagoniensis*).

Description.—Length of forewing: 6.0–8.0 mm. Head with front with white-tipped brown or fuscous scales; vertex similar to front but with some completely white scales; labial palpus white at base, becoming brown to fuscous distally; maxillary palpus white and fuscous, or white and brown. Thorax with dorsum grayish brown near collar, mostly white elsewhere; collar mostly white with few brown or fuscous scales. Forewing mostly white, irrorated with brown or fuscous; obscure subbasal patch of pale brown in posterior half; antemedial line moderately distinct, curved, pale brown to brown, bordered distally by fuscous or black line of scales; postmedial line rather indistinct, pale brown, delineated on its proximal margin near costa by fuscous or black; obscure patch of pale brown scales between transverse lines in posterior half; discal spots fuscous or black, obscure to moderately distinct. Hindwing whitish brown, darker along veins and near costal and outer margins. Male and female genitalia (Figs. 36, 37, 72) as in description of genus.

Distribution.—Southern Neuquén Province. Occurs in areas having steppe vegetation.

Holotype.-ô-Piedra del Aguila, Neuquén Province, Argentina, 18 Nov 1978, Mision Científica Danesa, genitalia slide 2891 HHN (ZMUC).

Paratypes.—Argentina. Neuquén Prov.: Piedra del Aguila, 1 δ , 18 Dec 1978; 2 δ , 1 \circ , 19 Dec 1978, 1 δ , 23 Dec 1978, Mision Cientifica Danesa, \circ genitalia slide 2893 HHN. Rio Limay, Arroyito, 1 δ , 16 Nov 1978; 1 δ , 17 Nov 1978, 3 δ , 22 Dec 1978, Mision Cientifica Danesa. San Martín de Los Andes, Cerro Chapelco, 1400–1600 m, 1 δ , 12–23 Nov 1981, Nielsen & Karsholt. Zapala, El Marucho, 870 m, 4 δ , 26 Oct 1981, M. O. Gentili, genitalia slide 2892 HHN. Paratypes in ZMUC.

Inverina Neunzig and Goodson, New Genus

Gender.-Feminine.

Type species.—*Inverina suizensis* Neunzig and Goodson.

Antenna (Fig. 25) simple in both sexes; sensilla trichodea of shaft of male moderately abundant and about ²/₃ as long as basal diameter of shaft. Front convex with anteriorly projecting scales. Labial palpus of both sexes oblique. Maxillary palpus simple in both sexes. Haustellum well developed. Ocellus present. Basal 1/2 of costa of forewing of male (Fig. 21) straight to slightly convex; underside, of male, with costal fold bearing distal tuft of elongate scales. Forewing without raised scales; with 10 veins; R₂ well separated from R_{3+4} and R_5 at base; R_{3+4} and R_s completely united; M_1 with weak base; M_2 and M_3 stalked for about $\frac{1}{2}$ their lengths; CuA_1 from lower angle of cell; CuA_2 from well before lower angle of cell. Hindwing (Fig. 21) with 7 veins; $Sc + R_1 + R_s$ fused for slightly over 3/5 of their lengths beyond cell; M₁ separated from Sc + R_1 + R_s at base; M_{1+2} and CuA_1 stalked for about $\frac{1}{2}$ their lengths; CuA₂ from well before lower angle of cell; cell slightly less than ¹/₂ length of wing. Eighth abdominal segment of male

without scale tuft. Male genitalia (Figs. 44, 45) with uncus triangular, terminal margin broadly rounded; gnathos with apex broadly U-shaped, the arms well separated; transtilla weak, incomplete mesially; juxta with lateral lobes rather short, wrinkled; valva with triangularly shaped, dorsally projecting, costal process at basal third; aedoeagus with thin, sclerotized plates; vinculum about as long as greatest width, distinctly attenuated in distal half. Female genitalia (Fig. 69) with ductus bursae about as long as corpus bursae and sclerotized and granular for most of its length; corpus bursae membranous; signum a multitoothed, elongate sclerotized plate; weak scobinations in corpus bursae, mostly near signum; ductus seminalis attached to corpus bursae just anterior to signum.

Inverina is established for the new species suizensis. The genus is similar to Verina Heinrich, particularly with regard to genitalia, but differs in some important features, such as the venation of the wings. The forewing of Inverina (Fig. 21) has R₂ well separated from R_{3+4} and R_5 at base and M_2 and M_3 stalked for about $\frac{1}{2}$ their lengths; the forewing of Verina has R₂ approximate to R_{3+4} and R_5 at base and M_2 and M_3 stalked for over ²/₃ their lengths. The hindwing of Invertina (Fig. 21) has M_{2+3} and CuA₁ stalked for about 1/2 their lengths and the cell slightly less than $\frac{1}{2}$ the length of the wing; in the hindwing of Verina M_{2+3} and CuA_1 are approximate at base and the cell is only $\frac{1}{3}$ the length of the wing. Also, Verina has a shallow, but distinct, sinus at the base of the male antenna that is lacking in Inverina.

Inverina suizensis Neunzig and Goodson, NEW SPECIES

Figs. 5, 21, 25, 44, 45, 69

Type locality.—San Carlos de Bariloche, Colonia Suiza, 810 m, Rio Negro Province, Argentina.

Diagnosis.—The male and female genitalia as outlined in the description of the genus are diagnostic for *I. suizensis*.

Description. – Length of forewing: 6.0–9.0

mm. Head with front and vertex pale brown or brown, vertex usually slightly paler than front; labial palpus white at base, becoming brown distally; maxillary palpus brown. Thorax with dorsum pale brown; collar similar to dorsum. Forewing with ground color fuscous; lightly dusted with white (white most noticeable in basal costal half); overlay of pale brownish red scales, with most forming an inconspicuous longitudinal streak just below cell basally and extending distally to just above tornus; antemedial line somewhat weakly developed, its position mostly defined by a black distal border; postmedial line indistinct, immediately preceded by a black border; discal spots black, separate or fused. Hindwing smoky fuscous, darker along veins and near costal and outer margins. Male and female genitalia (Figs. 44, 45, 69) as in description of genus.

Distribution. – Southwestern Neuquén Province south to southwestern Santa Cruz Province in Argentina. *Inverina suizensis* is usually associated with forest ecosystems dominated by *Nothofagus* Blume.

Holotype.—&—San Carlos de Bariloche, Colonia Suiza, 810 m, Rio Negro Province, Argentina, 29 Dec 1978, Mision Científica Danesa, genitalia slide 2989 HHN (ZMUC).

Paratypes.—Argentina. Chubut Prov.: Esquel, SE shore of Lago Futalaufquen, 600 m, 1 8, 18 Feb 1979, Mision Cientifica Danesa, genitalia slide 3029 HHN. Esquel, 550 m, 1 8, 1 Jan 1982, Nielsen & Karsholt, genitalia slide 3027 HHN. Esquel, Lago Menéndez, El Sagrario Puerto, 600 m, 1 8, 2–4 Jan 1982, Nielsen & Karsholt, genitalia slide 3026 HHN. Neuquén Prov.: Lago Lacar, Pucará, 650 m, 2 8, 26-27 Dec 1981, Nielsen & Karsholt, genitalia slides 2955, 2961 HHN. Rio Negro Prov.: Lago Nahuel Huapí, Puerto Blest, 770 m, 2 ô, 22 Dec 1978, 5 Jan 1979, Mision Cientifica Danesa. San Carlos de Bariloche, Colonia Suiza, 810 m, 3 9, 10 Jan 1978; 1 8, 9 Dec 1978; 2 8, 1 9, 11 Dec 1978; 1 8, 12 Dec 1978; 2 ô, 24 Dec 1978; 1 ô, 28 Dec 1978, 5 ô, 29 Dec 1978; 1 8, 31 Dec 1978; 2 8, 1 Jan 1979;

5 8, 3 9, 9 Jan 1979; 1 8, 4 9, 13 Jan 1979; 2 º, 16 Jan 1979, Mision Científica Danesa, 1 8, 1 9 genitalia slides 2998, 2990 HHN. San Carlos de Bariloche, Colonia Suiza, 800 m, 1 8, 23 Dec 1981; 1 8, 24 Dec 1981; 1 ô, 1 9, 5–7 Jan 1982, Nielsen & Karsholt, 1 δ. 1 9, genitalia slides 2991, 2992 HHN. San Carlos de Bariloche, Lago Steffen, 550 m, 1 9, 27 Feb 1979, Mision Cientifica Danesa. San Carlos de Bariloche, Nirihuau, 1 9, 30 Dec 1978; 1 8, 2 Jan 1979, Mision Cientifica Danesa. Santa Cruz Prov.: Lago Argentino, El Calafate, 200 m, 1 8, 12 Jan 1979, Mision Cientifica Danesa, genitalia slide 3042 HHN. Lago Argentinos, Península Magallanes, 250 m, 3 &, 2 9, 11 Jan 1979, Mision Cientifica Danesa, 1 8, 1 9, genitalia slides 3035, 3040 HHN. Lago Argentino, Península Magallanes, 2 &, 2 9, 11 Jan 1979; 2 &, 12 Jan 1979, Mision Cientifica Danesa, 2 3, 2 9, genitalia slides 3036, 3037, 3038, 3039 HHN. Paratypes in ZMUC.

> *Ephestiodes argentinus* Neunzig and Goodson, NEW SPECIES Figs. 6, 40, 41, 73

Type locality.—Rio Limay, Arroyito, Neuquén Province, Argentina.

Diagnosis. – E. argentinus is similar to Ephestiodes lucidibasella Ragonot. The latter species, however, has the terminal area of the forewing darker than the basal $\frac{1}{3}$ of the wing, whereas in the former species the terminal area and the basal $\frac{1}{3}$ of the wing are both pale. The male genitalia of E. argentinus have the apical processes of the gnathos shorter and broader than in E. lucidibasella, and the sclerotized and granulate part of the ductus bursae of the female genitalia in E. argentinus is longer than in E. lucidibasella.

Description.—*Length of forewing:* 5.5–7.0 mm. *Head* with front and vertex mostly brown or fuscous, lightly dusted with white; antenna simple in both sexes; labial palpus fuscous dusted with white (basal segment sometimes with all white or brownish white scales), upturned in both sexes; maxillary

palpus brown, lightly dusted with white, simple in both sexes. Thorax with dorsum and collar mostly pale brown. Forewing with ground color fuscous; basal patch of pale brown or pale reddish brown: most of remaining area preceding antemedial line also pale brown or pale reddish brown; antemedial line relatively indistinct, brownish white or white, blending with pale area preceding line; postmedial line usually rather indistinct, brownish white or white; medial area darker than rest of wing, sometimes with longitudinal streak of pale brown, reddish brown or brown in posterior half of wing; terminal area pale, similar to basal and subbasal area of wing; discal spots black, usually indistinct; underside, of male, with costal fold. Hindwing smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 with paired dorsal scale tufts, each tuft consisting of four clusters of scales; second cluster of each tuft slender, sinuous and longer than others. Male genitalia (Figs. 40, 41) with uncus broadly rounded; gnathos with apex forked, the apical processes rather short and stout and directed slightly inwards; transtilla with distal elements divergently flared and wrinkled; juxta a semicircular band; valva with very weakly developed, angled transverse ridge across edge of cucullus; aedoeagus relatively narrow, with weak, thin cornutus; vinculum slightly longer than greatest width. Female genitalia (Fig. 73) with ductus bursae longer than corpus bursae and sclerotized and granulate for $\%_{10}$ of its length; ductus bursae not strongly constricted in posterior half; corpus bursae membranous, oval, with signum a small cluster of flattened thornlike spines; ductus seminalis attached to corpus bursae near signum.

Distribution.—Eastern Neuquén Province, Argentina. Associated with steppe vegetation.

Holotype. – & – Rio Limay, Arroyito, Neuquén Province, Argentina, 19 Dec 1978, Mision Cientifica Danesa, genitalia slide 2916 HHN (ZMUC). Paratypes. – Argentina. Neuquén Prov.: Piedra del Aguila, 1 δ , 19 Dec 1978, Mision Cientifica Danesa. Rio Limay, Arroyito, 2 δ , 1 \circ , 17 Dec 1978; 1 δ , 1 \circ , 22 Dec 1978, Mision Científica Danesa, δ and \circ genitalia slides 2917, 3072, 3073 HHN. Paratypes in ZMUC.

Erelieva steppeiana Neunzig and Goodson, New Species Figs. 7, 42, 43

Type locality.—Rio Limay, Arroyito, Neuquén Province, Argentina.

Diagnosis.—Only males of *E. steppeiana* have been collected. It is necessary to examine the genitalia (Figs. 42, 43), and the eighth abdominal segment to identify the species. The uncus is more elongate, the subanal plate of the gnathos more narrow, and the apical part of the transtilla more narrowly forked in *E. steppeiana* than in other species in the genus. Also, the valva of *E. steppeiana* bears a distinctly pointed costal process, whereas other congeneric species have only a low, elongate costal lobe. In addition, *E. steppeiana* lacks the scale tuft on the eighth abdominal segment found in other *Erelieva*.

Description.—Length of forewing: 6.5–7.5 mm. Head with front and vertex with whitetipped fuscous to black scales; antenna of male with very shallow sinus near base of shaft; labial palpus white basally, fuscous to black distally, upturned in male; maxillary palpus fuscous at base, white distally, simple. Thorax with dorsum with white-tipped brown or fuscous scales; collar similar to dorsum. Forewing with ground color fuscous, dusted with white; antemedial line white, distinct, bordered distally by broad patch of black; postmedial line white, moderately distinct; discal spots black, usually separate; underside of male with basal costal fold. Hindwing smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 without scale tufts. Male genitalia (Figs. 42, 43) with

uncus subtriangular, truncate; gnathos without usual apical process, arms fused distally to form subanal plate; transtilla with forked, wrinkled distal process; juxta with small, setiferous lateral lobes; valva with distinctly pointed costal process located at about ²/₃ distance to apex of valva; aedoeagus with enlarged, slightly hooked apex; vinculum about as long as greatest width.

Distribution.—Eastern and southeastern Neuquén Province, Argentina. This species was collected in vegetation transitional between bush steppe and Patagonian steppe.

Holotype. – ð – Rio Limay, Arroyito, Neuquén Province, Argentina, 17 Nov 1978, Mision Científica Danesa, genitalia slide 2931 HHN (ZMUC).

Paratypes.—Argentina. Neuquén Prov.: same data as for holotype, 1 ô. Piedra del Aguila, 5 ô, 18–19 Dec 1978, Mision Cientifica Danesa, genitalia slides 2887, 2933 HHN. Paratypes in ZMUC.

Homoeosoma strongylognathosum Neunzig and Goodson, NEW SPECIES Figs. 8, 46, 47, 75, 76

Type locality.—Piedra del Aguila, Neuquén Province, Argentina.

Diagnosis.-There have been three species of Homoeosoma (sensu Roesler (1973); i.e. excluding *Patagonia* Ragonot species) described from southern South America. They are H. longiventrellum Ragonot, H. discrebile Heinrich and H. heinrichi Pastrana. The male of H. longiventrellum has exceptionally long arms projecting from the vinculum of the male genitalia, and the males of H. discrebile and H. heinrichi both have an eighth abdominal segment scale tuft. Homoeosoma strongylognathosum and the other species of Homoeosoma described in this paper (H. eurygnathosum and H. pauroaichmetes) have neither long projecting vinculum arms nor an eighth abdominal scale tuft. Homoesoma strongylognathosum is best distinguished from H. eurygnathosum and H. pauroaichmetes by reference to the genitalia (Figs. 46, 48, 50, 75). In H. strongylognathosum the male gnathos has the anterior margin of its apical process broadly rounded, and the female apophysis posterioris long (over $4 \times$ as long as the length of the sclerotized collar); the other two species have the gnathos with the anterior margin of the apical process either straight or concave (sometimes with a small mesial protuberance) or straight to shallowly convex, and the apophysis posterioris less than $4 \times$ as long as the length of the sclerotized collar.

Description.-Length of forewing: 9.0-11.5 mm. Head with front pale brown to fuscous and white: vertex pale brown to fuscous and white (white usually most apparent near eves and at base of antenna); antenna of male with shaft notched at base, of female simple; labial palpus white basally, becoming pale brown to fuscous distally, porrect (second segment slightly oblique, third segment directed forward) in both sexes: maxillary palpus pale brown to fuscous, sometimes dusted with white, simple in both sexes. Thorax with dorsum and collar mostly white or brownish white suffused with fuscous, sometimes with a few pale reddish brown scales. Forewing with ground color fuscous, well mixed with white scales; solid white streak extending along top of cell and reaching more or less to apex; costa black, narrowly so in basal half, but black streak broadening in distal half to form distinct, relatively broad, dark costal patch; a few veins overlaid, in part, with black; antemedial and postmedial lines, or patches or spots of dark scales frequently associated with these transverse lines, not evident; some specimens with a very few pale reddish brown scales in posterior half; discal spots indistinct: underside of male with narrow costal fold. Hindwing rather dark smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 with thornlike ventral process, and without scale tuft. Male genitalia (Figs. 46,

47) with uncus triangular, apex rounded; gnathos with apical process triangular, anterior margin broadly rounded; lateral arms of gnathos strongly arched posteriorly at apical process; transtilla incomplete mesially; juxta U-shaped with rather long, relatively straight, lateral arms; valva simple; vinculum about as long as greatest width; aedoeagus approximately straight with elongate internal ridged element. Female genitalia (Figs. 75, 76) with papilla analis lightly sclerotized; apophysis posterioris long, $4.2 \times$ as long as length of sclerotized collar: ductus bursae membranous: corpus bursae membranous with signum a dense cluster of robust spines located near middle of bursae, and patch of weakly formed microspines near junction of ductus bursae and corpus bursae; ductus seminalis attached to corpus bursae near junction with ductus bursae.

Distribution.—Southeastern Neuquén Province. Collected in a transitional zone between bush steppe and Patagonian steppe along the Limay River.

Holotype. – ô – Piedra de Aguila, Neuquén Province, Argentina, 19 Dec 1978, Mision Científica Danesa, genitalia slide 811 RLG (ZMUC).

Paratypes. – Argentina. Neuquén Prov.: same data as for holotype, $3 \,$, genitalia slide 816 RLG. Piedra del Aguila, $3 \,$, $4 \,$, 18 Dec 1978; $1 \,$, 23 Dec 1978, Mision Cientifica Danesa, genitalia slides 813, 814, 894, 895, 896, 900 RLG. Arroyito, Rio Limay, $1 \,$, $1 \,$, 16 Nov 1978; $2 \,$, 17 Nov 1978; $2 \,$ $3 \,$, 22 Dec 1978, Mision Cientifica Danesa, genitalia slides 812, 815, 892, 893, 898, 899 RLG. Paratypes in ZMUC.

Homoeosoma eurygnathosum Neunzig and Goodson, NEW SPECIES Figs. 9, 50, 51, 77

Type locality.—Piedra del Aguila, Neuquén Province, Argentina.

Diagnosis.—Similar in general appearance to *H. strongylognathosum*, but forewings with white more extensive, and hindwings somewhat less dark. Genitalic differences between *H. eurygnathosum* and *H. strongylognathosum* also exist, as mentioned under the diagnosis of *H. strongylognathosum*. Although the genitalia of *H. eurygnathosum* and a third species of *Homoeosoma* (*pauroaichmetes*), described as new in this paper, are somewhat alike, the forewing of *H. eurygnathosum* is more uniformly white and lacks the black longitudinal lines characteristic of *H. pauroaichmetes*.

Description.—Length of forewing: 8.5-10.5 mm. *Head* with front pale brown to fuscous and white; vertex pale brown, pale reddish brown or ochreous and white (white concentrated near eve and at base of antenna); antenna of male with shaft notched at base, of female simple; labial palpus with basal half, or most of basal half, white, sometimes with a few pale reddish brown or ochreous scales, distal half pale brown or mostly pale brown, porrect (second segment slightly oblique, third segment directed forward) in both sexes; maxillary palpus brown to pale brown, white distally, simple in both sexes. Thorax with dorsum and collar white suffused with pale brown, brown, pale reddish brown or ochre, and sometimes with a few fuscous scales. Forewing usually almost entirely white with a few scattered fuscous or black scales (a few moths mostly white, but with more dark scales); costa black, narrowly so in basal half, but black streak broadening in distal half to form distinct, relatively broad, dark costal patch; antemedial line not evident (in some specimens, a dark spot in posterior half near where antemedial line usually occurs); postmedial line absent; most specimens with an indistinct longitudinal patch of pale reddish brown to ochre in posterior half; a single discal spot weakly to rather well developed; underside of male with narrow costal fold. Hindwing smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 with thornlike ventral process, and without scale tuft. Male genitalia (Figs. 50, 51) with uncus triangular,

apex rounded; gnathos with apical process a squat triangle, distinctly broad anteriorly and with anterior margin, except for sometimes a small mesial protuberance, rather straight or concave; lateral arms of gnathos moderately arched posteriorly at apical process; transtilla incomplete mesially; juxta U-shaped with somewhat sinuate lateral arms; valva simple; vinculum shorter than greatest width; aedoeagus slightly sinuate, with elongate internal ridged element. Female genitalia (Fig. 77) with papilla analis lightly sclerotized; apophysis posterioris $3.8 \times$ as long as length of sclerotized collar; apophysis anterioris $2.3 \times$ as long as length of sclerotized collar; ductus bursae membranous; corpus bursae membranous with dense cluster of robust spines (signum) near middle of bursae, and patch of very weakly formed microspines near junction of ductus bursae and corpus bursae; ductus seminalis attached to corpus bursae near junction with ductus bursae.

Distribution.—Southern Neuquén Province, and southwestern Rio Negro Province. Most specimens collected in bush and Patagonian steppe at the Limay River.

Holotype.—ô—Piedra del Aguila, Neuquén Province, Argentina, 19 Dec 1978, Mision Cientifica Danesa, genitalia slide 819 RLG (ZMUC).

Paratypes. – Argentina. Neuquén Prov.: same data as for holotype, 2 &, 3 &, genitalia slides 820, 881 RLG. Aluminé, 1200 m, 3 , 14 March 1979, Mision Cientifica Danesa, genitalia slide 821 RLG. San Martín de los Andes, 1 &, 11 Dec 1950, S. Shachovskoj, genitalia slide 825 RLG. Rio Negro Prov.: Ñorquincó. 1 &, 1 &, 25 Jan 1961, Gy Topál, genitalia slides 826, 827 RLG. Paratypes in ZMUC.

Homoeosoma pauroaichmetes Neunzig and Goodson, NEW SPECIES Figs. 10, 48, 49, 74

Type locality.—El Marucho, Zapala, 870 m, Neuquén Province, Argentina.

Diagnosis.-A dark antemedial spot or

band that is absent in *H. strongylognatho*sum and sometimes weakly developed in *H.* eurygnathosum is usually rather well defined in *H. pauroaichmetes*. Also, features separating *H. pauroaichmetes* from other *Homoeosoma* occurring in southern South America have been discussed under the previous two species, *H. strongylognathosum* and *H. eurygnathosum*.

Description.—Length of forewing: 8.5–9.0 mm. Head with front pale brown to brown and white; vertex pale brown to brown and white (white concentrated near eye and at base of antenna); antenna of male with shaft notched at base, of female simple; labial palpus with basal half, or most of basal half, white, distal half pale brown or fuscous or mostly pale brown or fuscous, porrect (second segment slightly oblique, third segment directed forward) in both sexes; maxillary palpus pale brown to fuscous, usually white distally, simple in both sexes. Thorax with dorsum a mixture of pale brown, brown, fuscous and white; collar mostly white with some pale brown to fuscous suffusions. Forewing white, fuscous and black; solid white streak extending along top of cell and reaching more or less undiminished to apex; costa black in basal half, becoming mixed with white in distal half; several veins overlaid with black; relatively well developed antemedial dark band (band curved and extending from posterior margin to white longitudinal streak near costa); antemedial and postmedial lines not evident; some specimens with a very few pale reddish brown scales in posterior half; discal spots indistinct: underside of male with narrow costal fold. *Hindwing* pale smoky fuscous, slightly darker along veins and near costal outer margins. Male abdominal segment 8 with thornlike ventral process and without scale tuft. Male genitalia (Figs. 48, 49) with uncus triangular, apex rounded; gnathos with apical process triangular, with anterior margin straight to shallowly convex; lateral arms of gnathos moderately arched posteriorly at apical process; transtilla incomplete mesially; juxta U-shaped with relatively straight

lateral arms; valva simple; vinculum about as long as greatest width; aedoeagus rather straight with elongate internal ridged element. *Female genitalia* (Fig. 74) with papilla analis lightly sclerotized; apophysis posterioris $3.3 \times$ as long as length of sclerotized collar; apophysis anterioris $1.8 \times$ as long as length of sclerotized collar; ductus bursae membranous; corpus bursae membranous with dense cluster of robust spines (signum) located near middle of bursae, and with patch of rather distinct microspines near junction of ductus bursae and corpus bursae; ductus seminalis attached to corpus bursae near junction with ductus bursae.

Distribution.-Central Neuquén Province.

Holotype. – & – El Marucho, Zapala, 870 m, Neuquén Province, Argentina, 26 Oct 1981, M. O. Gentili, genitalia slide 835 RLG (ZMUC).

Paratypes. – Argentina. Neuquén Prov.: same data as for holotype, 3 9, genitalia slide 836 RLG, 3103 HHN. Paratypes in ZMUC.

Ohigginsia Neunzig and Goodson, New Genus

Gender.-Feminine.

Type species. – *Ohigginsia diversa* Neunzig and Goodson.

Antenna, of male (Fig. 28), with short, robust sensillum in shallow sinus of shaft and with sensilla trichodea of shaft moderately abundant and about ²/₃ as long as basal diameter of shaft; simple in female. Front convex, roughly scaled. Labial palpus of both sexes oblique. Maxillary palpus simple. Haustellum well developed. Ocellus present. Basal 1/2 of costa of forewing of male (Fig. 22) slightly convex; underside, of male, simple, without costal fold or sex-scaling. Forewing without raised scales; with 11 veins, R₂ from cell, approximate to stalk of R_{3+4} and R_5 for short distance; R_{3+4} and R_5 stalked for about ²/₃ their length; M₁ with weak base; M_2 and M_3 approximate for short distance beyond base; CuA₁, from lower angle of cell; CuA₂ from before lower angle of cell. Hindwing (Fig. 22) with 8 veins; Sc + R_1 and R_8 fused for about $\frac{1}{2}$ their lengths beyond cell; M_1 approximate to Sc + R_1 and R_s at base; M_2 and M_3 stalked for slightly over 1/2 their lengths; CuA₁ fused for short distance at base with $M_2 + M_3$; CuA₂ from slightly before lower angle of cell; cell about ¹/₃ length of wing; eighth abdominal segment of male with pair of ventral scale tufts; scales forming tufts numerous, filamentous and arising from basal and outer margins of broadly U-shaped, sclerotized plate. Male genitalia (Figs. 52, 53) with uncus reduced mesially, with pair of lateral, curved, but mostly dorsally projecting setiferous arms; gnathos absent; transtilla weak, incomplete mesially; juxta a strongly sclerotized, U-shaped element bearing preapically, on inner margin, groups of small setae; valva short, trilobed; cucullus divided into posterior, elongate costal lobe, that bears distal, robust, spinelike process, and anterior, setiferous, clublike lobe (anterior setae of lobe enlarged and spinelike); base of anterior lobe with setiferous, elongate protuberance; sacculus partially separated from cucullus distally and resulting lobe hooklike; aedoeagus elongate, simple; vinculum shorter than greatest width. Female genitalia (Fig. 78) with apophyses anteriores arched and with bases fused mesially; ductus bursae simple, about as long as corpus bursae; posterior half of corpus bursae with faint microspines; signum a well developed spine with an enlarged, keeled base; ductus seminalis attached to corpus bursae near junction of ductus bursae and corpus bursae.

Based on the general appearance of the male genitalia, *Ohigginsia* is closely related to *Gabinius* Heinrich. The male antenna of the two genera differ in that *Ohigginsia* has a shallow sinus in the base of the shaft that bears distally a short, robust, slightly curved, flattened sensillum (Fig. 28), whereas the male antenna of *Gabinius* is simple. Also, the valva of the male genitalia (Fig. 52) of *Ohigginsia* has the cucullus deeply divided and the sacculus partially separated from

the cucullus; in *Gabinius* the cucullus is only slightly lobed and the sacculus fused over its entire length to the cucullus. The most salient difference between the two genera can be found in the female genitalia. In *Ohigginisa* the apophyses anteriores are unusually arched and their bases fused mesially (Fig. 78); the apophyses anteriores of *Gabinius* are approximately straight and broadly separated basally, as is the condition in other phycitines.

Ohigginsia diversa Neunzig and Goodson, NEW SPECIES

Figs. 11, 22, 28, 52, 53, 78

Type locality.—Lago Nahuel Huapí, Puerto Blest, 770 m, Rio Negro Province, Argentina.

Diagnosis.—The male and female genitalia (Figs. 52, 53, 78), as outlined in the description of the genus, are diagnostic for *O. diversa*.

Description.-Length of forewing: 8.5-12.0 mm. Head with front pale brown to pale brownish red, sometimes partially fuscous; vertex paler than front, usually mostly pale brown; labial palpus white basally, brown or mixture of brown, brownish red, and sometimes fuscous, distally; maxillary palpus usually pale brown, sometimes with a few white, fuscous, brown or brownish red scales. Thorax with dorsum usually pale brown with mixture of few to many, brown, brownish red, and fuscous scales, sometimes entirely pale brown; collar similar to dorsum. Forewing with ground color fuscous; most specimens with white and brownish red subbasal patch and white longitudinal streak between transverse lines in costal half; an elongate, pale brown, brownish red, or brownish red and fuscous costal patch anterior to white streak; some moths with white streak missing and entire medial area brownish red and fuscous, giving wing a transversely banded appearance; subbasal area in posterior half usually brownish white and brownish red; antemedial line mostly obscure, usually white near costa; postmedial line indistinct, its presence, in some specimens, indicated by dark, transverse band; terminal area with varying amounts of white, brownish white, and brownish red scales; discal spots usually obscure. *Hindwing* smoky fuscous, darker along veins and near costal and outer margins. *Male and female genitalia* (Figs. 52, 53, 78) as in description of genus.

Distribution.—Southwestern Neuquén and Rio Negro Provinces, and northwestern and western Chubut Province, Argentina, and eastern Orsono Province, Chile. Mainly collected in forests dominated by *Nothofagus* spp.

Holotype. – & Lago Nahuel Huapí, Puerto Blest, 770 m, Rio Negro Province, Argentina, 27 Nov 1978, Mision Científica Danesa, genitalia slide 2973 HHN (ZMUC).

Paratypes.-Argentina. Chubut Prov.: (South of) El Bolsón, Lago Puelo, 250 m, 3 ð, 1 9, 22 Oct 1981; 1 ð, 2 9, 23 Oct 1981, Nielsen & Karsholt. Esquel, Lago Menéndez, El Sagrario Puerto, 600 m, 2 8, 7 9, 2-4 Jan 1982, Nielsen & Karsholt, Neuquén Prov.: Junín de Los Andes, Laguna Verde, 1000 m, 1 8, 1 9, 25 Nov 1981, M. O. Gentili. Lago Lacar, 5 km E of Hua-Hum, 640 m, 1 8, 5 Oct 1981; 1 9, 5-6 Nov 1981, Nielsen & Karsholt. Lago Lacar, 5 km E of Hua-Hum, 1 &, 6 Nov 1981; 2 &, 1 9, 25 Nov 1981; 1 9, 26-27 Dec 1981, Nielsen & Karsholt. Lago Tromen, Rodeo Grande, 900 m, 1 8, 30 Nov 1978. Mision Cientifica Danesa. San Martín de Los Andes, 640 m, 2 8 21-27 Sep 1981; 4 å, 29 Sep 1981; 1 å, 7 Oct 1981; 1 &, 8 Oct 1981; 2 &, 10-12 Oct 1981; 2 8, 13 Oct 1981; 1 9, 16 Oct 1981, Nielsen & Karsholt. San Martín de Los Andes, Piedra Trampul, 1000 m, 2 8, 15 Oct 1981, Nielsen & Karsholt. San Martín de Los Andes, 1 9, 11 Dec 1950, S. Shachovskoj. Rio Negro Prov.: El Bolsón, Cerro Piltriquitron. 1 8, 30 Oct 1961; 1 8, 31 Oct 1961; 1 9, 7 Nov 1961, Gy. Topál, 8 genitalia slide 2964 HHN. El Bolsón, Cerro Piltriquitron, 500-1000 m, 1 8, 20 Oct 1961, Gy. Topál. Lago Frias, Puerto Frias, 780 m,

1 8, 7 Dec 1981, Nielsen & Karsholt, 8 genitalia slide 2974 HHN. Lago Nahuel Huapí, Puerto Blest, 770 m, 1 8, 7 Nov 1978; 1 8, 12 Nov 1978; 1 8, 2 9, 27 Nov 1978; 1 9, 4 Dec 1978; 4 å, 8 °, 17 Dec 1978; 2 å, 11 °, 18 Dec 1978; 1 8, 6 9, 20 Dec 1978; 5 8, 3 9, 22 Dec 1978; 19, 23 Dec 1978; 49, 24 Dec 1978; 1 9, 30 Dec 1978; 1 9, 2 Jan 1979, Mision Cientifica Danesa, & and 9 genitalia slides 2964, 2965, 2967, 2968, 2969 HHN. Lago Nahuel Huapí, Puerto Blest, 770 m, 1 8, 21 Oct 1981; 3 8, 22 Nov 1981; 1 8, 1 9, 22-30 Nov 1981; 2 8, 3 Dec 1981; 2 8, 5 9, 3-8 Dec 1981; 1 9, 9-21 Dec 1981; 1 9, 22-31 Dec 1981; 2 9, 1-6 Jan 1982, Nielsen & Karsholt, & genitalia slides 2975, 2988 HHN. San Carlos de Bariloche, Colonia Suiza, 800 m, 1 å, 22 Sep 1981; 1 å, 28-30 Sep 1981; 2 9, 12 Oct 1981; 2 8, 13–17 Oct 1981; 1 9, 22–23 Oct 1981; 1 8, 12–20 Nov 1981; 2 å, 2 9, 23 Nov 1981; 1 9, 20–30 Nov 1981; 1 9, 2 Dec 1981; 1 9, 3 Dec 1981; 1 9, 7 Dec 1981, Nielsen & Karsholt, 8 genitalia slides 2976, 2977, HHN. San Carlos de Bariloche, Colonia Suiza, 810 m, 1 8, 5 Nov 1978; 2 9, 7 Dec 1978; 1 8, 11 Dec 1978, Mision Cientifica Danesa. San Carlos de Bariloche, Pampa del Toro, 900 m, 4 ô, 22-23 Oct 1981, Nielsen & Karsholt. Paratypes in ZMUC.

Chile. Orsono Prov.: Parque Nacional Puyehue, Agua Calientes, 450 m, 1 ô, 12 Dec 1981, Nielsen & Karsholt, genitalia slide 3052 HHN. Paratype in ZMUC.

> Ragonotia confluenciana Neunzig and Goodson, NEW SPECIES Figs. 12, 31, 56, 57, 79

Type locality.—(North of) San Carlos de Bariloche, Confluencia, 690 m, Neuquén Province, Argentina.

Diagnosis. — Based on the wing venation, the distinctive male antenna (Fig. 31) (longitudinal rows of rather long sensillae), the much reduced haustellum, the large porrect labial palpus of both sexes and the appearance of the female genitalia (particularly the setation of the papilla analis), confluenciana belongs to Grote's Ragonotia. The Argentine species is easily separated from its North American counterpart (Ragonotia dotalis (Hulst)) on the basis of differences in the male genitalia. Ragonotia dotalis males have a strongly developed club-shaped clasper on the valva, and an aedoeagus with a spinelike cornutus; both the clasper and cornutus are lacking in *R. confluenciana*.

Description.—Length of forewing: 12.0– 15.0 mm. Head with front and vertex mostly white, spotted with brown, fuscous or black; antenna of male (Fig. 31) with sensilla trichodea on shaft about $2 \times$ as long as basal diameter of shaft and arranged in two longitudinal rows; antenna of female simple; labial palpus white, rather heavily suffused with brown, fuscous or black, porrect in both sexes, extending forward about twice length of head; maxillary palpus mostly white, simple in both sexes. Thorax with dorsum mostly brown or dark brown; partially white and pale brown, particularly posteriorly; collar mostly white, mixed with pale brown, brown, fuscous and black. Forewing mostly a combination of white and fuscous or black, giving wing, viewed through the microscope, a speckled appearance; antemedial line weakly formed, with an irregular, rather indistinct fuscous or black line delineating its distal border; postmedial line similar to antemedial line, bordered basally by fuscous or black line; patches of ochre or pale brown sometimes present, particularly in posterior half of wing; discal spots usually obscure; underside, of male, without costal fold or sex-scaling. Hindwing smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 without scale tufts. Male genitalia (Figs. 56, 57) with uncus subtriangular, gnathos with strongly formed apical hook; transtilla weakly developed, incomplete mesially; juxta a V-shaped plate; valva simple; aedoeagus sclerotized, slender, without cornutus; vinculum distinctly broader than long. Female genitalia (Fig. 79) with papilla

analis bearing many long setae; ductus bursae shorter than corpus bursae, sclerotized near junction with corpus bursae, corpus bursae membranous without signum; ductus seminalis attached to ductus bursae at or near sclerotized part of ductus bursae.

Distribution. – Known only from southern Neuquén Province. *R. confluenciana* occurs in a steppe environment.

Holotype. – & – (North of) San Carlos de Bariloche, Confluencia, 690 m, Neuquén Province, Argentina, 17 Oct 1981, M. O. Gentili, genitalia slide 2918 HHN (ZMUC).

Paratypes. – Argentina. Neuquén Prov.: Rio Limay, Arroyito, 1 \circ , 16 Nov 1978; 1 \circ , 17 Nov 1978, Mision Cientifica Danesa, genitalia slide 2920 HHN, Zapala, El Marucho, 870 m, 3 \circ , 26 Oct 1981. M. O. Gentili, genitalia slide 2919 HHN. Paratypes in ZMUC.

Passadena argentina Neunzig and Goodson, New Species Figs. 13, 54, 55, 81

Type locality.—Fitz Roy, Rio Deseado, Santa Cruz Province, Argentina.

Diagnosis.-The only other species in Passadena is flavidorsella (Ragonot), a predominantly pale gray species with a subbasal ridge of raised scales on the forewing, and complete, distinct, black, transverse, distal and proximal patches bordering the antemedial line of the forewing; P. argentina is mostly fuscous, has no scale ridge, and the antemedial line is only partially bordered with black. Also, the labial palpus of *P. argentina* is more than twice the length of the head, whereas in P. flavidorsella the labial palpus is shorter, extending forward less than twice the length of the head. Genitalic differences also exist. For example in the male the limits of the sacculus and cucullus are clearly evident in P. flavidorsella (a sclerotized process of the clasper almost completely separates them, and the cucullus is distinctly reduced in width); this separation is only barely perceptible in P. argentina. In addition, the vinculum is broad

in *P. flavidorsella* and narrow in *P. argentina*. The female genitalia of *P. flavidorsella* have a large spinose plate and a much smaller spinose plate in the wall of the corpus bursae; in *P. argentina* the plates, comprising the signa, are more similar in size.

Description. - Length of forewing: 10.5-11.5 mm. Head with front and vertex with white-tipped fuscous or black scales; antenna of male with sinus and associated scale tuft near base of shaft; labial palpus with basal segment mostly white, and other segments with white-tipped fuscous or black scales, porrect (second segment slightly oblique, third segment small, directed forward); maxillary palpus of male aigrettelike, of female filiform and white and fuscous, or black. Thorax with dorsum and collar with white-tipped and white-lined fuscous or black scales. Forewing with ground color fuscous to black, entire wing lightly dusted with white; in addition to presence of many white-tipped scales, some scales not tipped with white but with 1-2 small white dots just before tip of scale, or with white lines; antemedial line white, well developed only in posterior half of wing; dark patch of scales adjacent to antemedial line proximally in posterior half and distally in costal half of wing; sometimes obscure patch of brown scales also associated with antemedial line: postmedial line white, indistinct; discal spots black, moderately distinct, separate; underside, of male, without costal fold or sexscaling. Hindwing brownish white, darker along veins and near costal and outer margins. Male abdominal segment 8 with two pairs of simple scale tufts. Male genitalia (Figs. 54, 55) with uncus triangular; apical process of gnathos a strongly developed hook; transtilla weakly developed, incomplete mesially; juxta a U-shaped plate with short, setiferous lateral arms; valva rather wide throughout its length and with strongly developed clasper from edge of cucullus; vinculum slightly longer than greatest width; aedoeagus armed with several rows of closely spaced spines. Female genitalia (Fig. 81)

with ductus bursae shorter than corpus bursae, with patch of dense microspines near genital opening, and sclerotized for slightly over half its length; corpus bursae membranous with signa consisting of two strongly developed spinose plates (one plate about twice as large and with twice as many spines as other plate); ductus seminalis attached to corpus bursae near junction of ductus bursae and corpus bursae.

Distribution.—Collected in southern Neuquén and northeastern Santa Cruz Provinces, Argentina. Probably also occurs in intervening Rio Negro and Chubut Provinces. *P. argentina* is associated with the Patagonian steppe.

Holotype.-ô-Fitz Roy, Rio Deseado, Santa Cruz Province, Argentina, 11 Feb 1979, Mision Cientifica Danesa, genitalia slide 3045 HHN (ZMUC).

Paratypes.—Argentina. Neuquén Prov.: Rio Limay, Arroyito, 1 &, 16 Dec 1978, 1 &, 17 Dec 1978, Mision Cientifica Danesa. (North of) San Carlos de Bariloche, Confluencia, 690 m, 1 &, 15–24 Nov 1981, M. O. Gentili, genitalia slide 2942 HHN. Zapala, El Marucho, 870 m, 2 &, 26 Oct 1981, M. O. Gentili, genitalia slide 2941 HHN. Santa Cruz Prov.: same collection data as for holotype, 1 Q, genitalia slide 3046 HHN. Paratypes in ZMUC.

Discussion.—*Passadena argentina* fits well into Hulst's genus despite the smooth (without scale ridge) forewing. Several phycitine genera such as *Acrobasis* Zeller and *Dioryctria* Zeller include species with and without a scale ridge, and therefore, the presence or absence of this feature is of importance only at the species level.

Pseudopassadena Neunzig and Goodson, New Genus

Gender.-Feminine.

Type species.—*Pseudopassadena gentilii* Neunzig and Goodson.

Antenna (Fig. 26) simple in both sexes; sensilla trichodea of shaft of male moderately abundant and about as long as basal diameter of shaft. Front convex, somewhat roughly scaled. Labial palpus of both sexes oblique basally, becoming porrect. Maxillary palpus simple in both sexes. Haustellum well developed. Ocellus present. Basal 1/2 of costa of forewing of male (Fig. 23) straight to slightly convex; underside, of male, without costal fold or sex-scaling. Forewing with weak subbasal ridge of raised scales; with 11 veins; R_2 from cell; R_{3+4} and R_5 stalked for about $\frac{1}{2}$ their lengths; M_1 from below upper angle of cell; M₂ and M₃ stalked for about ¹/₃ their lengths; CuA₁ from lower angle of cell; CuA₂ from before lower angle of cell. Hindwing (Fig. 23) with 8 veins; $Sc + R_1$ and R_s approximate beyond cell for short distance; M₁ fused with R_s at base; M_2 and M_3 long-stalked (for over $\frac{2}{3}$ their lengths); CuA_1 from stalk of M_2 and M_3 ; CuA₂ from before, but near, lower angle of cell; cell about 1/2 length of wing. Eighth abdominal segment of male with pair of ventral, rather weakly developed scale tufts (each tuft composed of a loose fascicle of moderately short, approximately straight, scales). Male genitalia (Figs. 58, 59) with uncus subtriangular, somewhat broadly rounded apically; gnathos with apical process slightly enlarged and rounded distally, sometimes with a small hook; transtilla weak, incomplete mesially; juxta a small, U-shaped plate; valva with a strongly developed clasper arising from edge of cucullus; aedoeagus with large, strongly sclerotized, elongate cornutus; vinculum about as long as wide. Female genitalia (Fig. 84) with slightly more than posterior 1/3 of ductus bursae enlarged and spinulose and most of remainder strongly sclerotized; corpus bursae with dorsum partially sclerotized; signum a ventral, U-shaped line of large spines more or less fused at their bases; ductus seminalis attached to corpus bursae near junction of ductus bursae and corpus bursae.

Pseudopassadena is a monobasic genus. Although it superficially resembles Passadena Hulst it is most closely related to Eupassadena Neunzig and Goodson. Pseudopassadena differs from Eupassadena in having the male antenna simple rather than bearing a tuft of scales, in possessing male genitalia with the apex of the gnathos enlarged, as opposed to attenuated, and in having female genitalia that lack toothed ridges in the anterior wall of the ductus bursae. Both Pseudopassadena and Eupassadena can be separated from Passadena in that they possess a large, well developed cornutus in the aedoeagus, and the corpus bursae is partly sclerotized.

> Pseudopassadena gentilii Neunzig and Goodson, NEW SPECIES Figs. 14, 23, 26, 58, 59, 84

Type locality.—Zapala, El Marucho, 870 m. Neuquén Province, Argentina.

Diagnosis. — The general appearance of *P. gentilii* is similar to that of *Eupassadena karsholti* Neunzig and Goodson. However, *P. gentilii* is more heavily dusted with white, and the black maculation more distinct than in *E. karsholti*. Many differences also exist in the male antenna, the maxillary palpus and male and female genitalia of the two species as described under the generic descriptions of *Pseudopassadena* and *Eupassadena*.

Description.—Length of forewing: 8.0–9.0 mm. Head with front and vertex white mixed with black; labial palpus mostly white in basal half and mostly fuscous or black in distal half; maxillary palpus mostly white. Thorax with dorsum mostly fuscous or black with some patches of white (tegulae mostly white with some pale brown, brown, fuscous and black); collar similar to tegulae. Forewing mostly white, irrorated with fuscous or black; antemedial line white, rather indistinct, blending with general white color of wing; pale brown subbasal patch bordering basal posterior margin of antemedial line; fuscous or black, and white, raised scale ridge just proximal to subbasal patch; distinct patch of fuscous or black bordering distal costal margin of antemedial line; postmedial line white, rather obscure, bordered proximally with fuscous or black, particularly in costal half; faint suffusion of pale brown in posterior half between transverse lines and in terminal area; discal spots fuscous or black, distinct, fused. *Hindwing* brownish white, darker along veins and near costal and outer margins. *Male and female genitalia* (Figs. 58, 59, 84) as in description of genus.

Distribution.—Known only from the type locality.

Holotype.—ô—Zapala, El Marucho, 870 m, Neuquén Prov., Argentina, 26 Oct 1981, M. O. Gentili, genitalia slide 2925 HHN (ZMUC).

Paratypes.—Argentina. Neuquén Prov.: sama data as for holotype, 1 ô, 1 9, genitalia slides 2926, 3087 HHN. Paratypes in ZMUC.

Eupassadena Neunzig and Goodson, New Genus

Gender. – Feminine.

Type species.—*Eupassadena karsholti* Neunzig and Goodson.

Antenna of male (Fig. 29) with sinus and associated scale tuft near base of shaft, of female simple: sensilla trichodea of shaft of male moderately abundant and about $\frac{1}{2}$ as long as basal diameter of shaft. Front convex, more or less roughly scaled. Labial palpus of both sexes oblique basally, becoming porrect distally. Maxillary palpus aigrettelike in male, simple in female. Haustellum well developed. Ocellus present. Basal 1/2 of costa of forewing of male (Fig. 24) straight to slightly convex; underside, of male, without costal fold or sex-scaling. Forewing with weak subbasal ridge of raised scales; venation as in Pseudopassadena. Eighth abdominal segment of male with two pairs of ventral, well developed scale tufts; each tuft composed of a rather compact cluster of slender, simple, approximately straight scales. Male genitalia (Figs. 60, 61) with uncus triangular; gnathos slender apically, de-

veloped into a sharply pointed hook; transtilla weakly developed, incomplete mesially, juxta a half-round, weakly formed plate; valva simple; aedoeagus with large, strongly developed, spinelike cornutus; vinculum longer than greatest width. Female genitalia (Fig. 82) with ductus bursae with slightly over posterior ¹/₃ enlarged, slightly sclerotized and spinulose, and anterior 1/3 heavily sclerotized; series of longitudinal ridges, some toothed, in anterior wall of heavily sclerotized part of ductus bursae; corpus bursae with dorsum partially sclerotized: two signa in corpus bursae consisting of large clusters of well developed spines with incompletely fused together flattened bases (small clear areas visible between bases of spines); ductus seminalis attached to corpus bursae near junction of ductus bursae and corpus bursae.

Eupassadena shares many features with *Pseudopassadena* and *Passadena*. Differences are mentioned in the generic description of *Pseudopassadena*.

Eupassadena karsholti Neunzig and Goodson, NEW SPECIES Figs. 15, 24, 29, 60, 61, 82

Type locality.—Rio Limay, Arroyito, Neuquén Province, Argentina.

Diagnosis. – Differences between *E. kar-sholti* and its nearest known relative, *Pseu-dopassadena gentilii*, were discussed under the description of the latter species.

Description. – Length of forewing: 7.5–8.5 mm. Head with front mostly white, or brownish white, vertex a mixture of white, brownish white and fuscous or black; labial palpus a mixture of white and fuscous and black; maxillary palpus of male mostly pale reddish brown, of female fuscous basally, white distally. Thorax with dorsum usually mostly fuscous anteriorly, mostly brownish white posteriorly (tegulae a mixture of white, brownish white, brown and fuscous or black); collar similar to tegulae. Forewing mostly white, irrorated with fuscous or black; pale brown basal patch in posterior half of wing; antemedial line white, distinct near costa; pale brown subbasal patch bordering antemedial line; fuscous or black, and white, raised, scale ridge proximal to subbasal patch; postmedial line white, indistinct; patches of pale brown between transverse lines in posterior half of wing and near discal spots; postmedial line bordered distally with pale brown and black or fuscous, darkest near costa; discal spots black, relatively distinct, fused. Hindwing smoky fuscous: darker along veins and near costal and outer margins. Male and female genitalia (Figs. 60, 61, 82) as in description of genus.

Distribution.—Collected only in southeastern Neuquén Province, Argentina, at a site with bush steppe and Patagonian steppe vegetation.

Holotype. – & – Rio Limay, Arroyito, Neuquén Province, Argentina, 16 Nov 1978, Mision Cientifica Danesa, genitalia slide 2921 HHN (ZMUC).

Paratypes. – Argentina. Neuquén Prov.: Piedra del Aquila, 1 9, 23 Dec 1978, Mision Cientifica Danesa. Rio Limay, Arroyito, 3 &, 3 9, 16 Nov 1978; 3 &, 6 9, 17 Nov 1978; 1 9, 22 Dec 1978. Mision Cientifica Danesa, 1 8, 1 9 genitalia slide 2922, 2946. Paratypes in ZMUC.

> Honora nirihuauensis Neunzig and Goodson, New Species Figs. 16, 64, 65, 85

Type locality.—San Carlos de Bariloche, Nirihuau, Rio Negro Province, Argentina.

Diagnosis.—In contrast to other species of *Honora, nirihuauensis* and the next species (*Honora palliolella* Neunzig and Goodson) have the forewing with a narrow black line basally along the costal margin that extends distally and to the upper surface to border the upper part of a smoothly curved antemedial line (line sometimes partially ochre in *H. palliolella*). Both *H. nirihuauen*- sis and *H. palliolella* also have the clasper of the valva of the male genitalia much reduced, and the aedoeagus without spinelike cornuti. *Honora nirihuauensis* differs from *H. palliolella* in being a distinctly darker species, and in having more spines, generally distributed, in the corpus bursae of the female.

Description. - Length of forewing: 10.5-13.5 mm. Head with front and vertex white laterally, brown or reddish brown mesially; antenna simple in both sexes; labial palpus mostly brown dusted with white in basal half, mixed with reddish brown in distal half, oblique basally, becoming porrect distally; maxillary palpus white, simple in both sexes. Thorax with dorsum a mixture of white, pale brown, reddish brown and fuscous or black; collar similar to dorsum but usually paler. Forewing with ground color fuscous; most of wing dusted with white, particularly in costal half; basal 1/4 with black streak along costal margin that extends to upper surface to become distal border of antemedial line; antemedial line white, rather indistinct, curved; postmedial line white, indistinct; overlay of varying amounts of pale reddish brown, concentrated mostly in posterior half of wing; discal spots black, separate, moderately distinct to obscure; underside, of male, without costal fold or sex-scaling. *Hindwing* pale smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 with pair of ventral scale tufts; tufts rather short, composed of approximately straight, slender scales. Male genitalia (Figs. 64, 65) with uncus triangular; gnathos with strongly formed apical hook; transtilla weakly developed, incomplete mesially; juxta platelike, without distinct lateral processes; valva simple, with very short, weakly formed clasper arising from sacculus near base of cucullus; aedoeagus short, simple; vinculum shorter than greatest width. Female genitalia (Fig. 85) with ductus bursae membranous; corpus bursae membranous with signum a strongly developed, large, round, densely spined plate; many additional, rather large spines, separate from signum, also present in corpus bursae; ductus seminalis attached to corpus bursae near junction with ductus bursae.

Distribution. – Associated with sites having Patagonian steppe vegetation in Chubut, Rio Negro, and Santa Cruz Provinces, Argentina.

Holotype. – & San Carlos de Bariloche, Nirihuau, Rio Negro Province, Argentina, 30 Dec 1978, Mision Científica Danesa, genitalia slide 3022 HHN (ZMUC).

Paratypes. – Argentina. Chubut Prov.: Esquel, 550 m, 1 å, 1 Jan 1982, Nielsen & Karsholt, genitalia slide 2982 HHN. Rio Negro Prov.: Ñorquincó, 5 å, 21 Jan 1961; 1 å, 1 º, 25 Jan 1961; 1 º, 17 Feb 1961, Gy Topál, 3 å, 2 º genitalia slides 2962, 2963, 2970, 2994, 2995 HHN. San Carlos de Bariloche, Nirihuau, 1 å, 2 Jan 1979, Mision Cientifica Danesa. Santa Cruz Prov.: Lago Argentino, El Calafate, 200 m, 1 å, 12 Jan 1979, Mision Cientifica Danesa, genitalia slide 3041 HHN. Paratypes in ZMUC.

Discussion.—Roesler (1973) made *Honora* a junior synonym of *Oncolabis* Zeller. We have not followed this interpretation because of major differences in the male antennae of the two genera.

Honora palliolella Neunzig and Goodson, New Species Figs. 17, 66, 67, 80

Type locality.—N. of Chos Malal, Barrancas, 850 m, Neuquén Province, Argentina.

Diagnosis.—*H. palliolella* is predominantly white, making it paler than other species in the genus. Also, information as to how *palliolella* is distinguished from other Honora is given in the diagnosis of the previous species (*Honora nirihuauensis*).

Description.—*Length of forewing:* 10.0– 11.0 mm. *Head* with front and vertex white, ochre mesially; antenna simple in both sexes; labial palpus white and ochre, oblique basally becoming porrect distally; maxillary palpus white, simple in both sexes. Thorax with dorsum and collar white, suffused with ochre. Forewing mostly white with thin black, or black and ochre, basal streak along costal margin extending to upper surface to become distal margin of antemedial line; additional black scales mostly in posterior half (usually most abundant in medial area near wing margin) and basad of postmedial line (mostly near apex); a few black scales forming an incomplete terminal line, and, with some specimens, a very few additional black scales generally distributed over wing; antemedial line white, blending with ground color, curved; postmedial line white, indistinct; obscure longitudinal streaks or patches of ochre mostly in posterior half, and, with some specimens, a few additional ochre scales generally distributed over wing; discal spots black, usually distinct, upper spot sometimes reduced; underside, of male, without costal fold or sex-scaling. *Hindwing* pale, whitish fuscous, slightly darker along veins and near costal and outer margins. Male abdominal segment 8 as in H. nirihuauensis. Male genitalia (Figs. 66, 67) very similar to genitalia of *H. nirihuauensis*; generally somewhat more robust; clasper on valva reduced, but slightly larger than in H. nirihuauensis. Female genitalia (Fig. 80) with ductus bursae membranous; corpus bursae membranous with signum a large, round, densely spined plate, and with a few separate spines; ductus seminalis attached to corpus bursae near junction with ductus bursae.

Distribution.—Known only from the type locality in northwestern Neuquén Province, Argentina. Associated with Patagonian steppe.

Holotype. – & – N. of Chos Malal, Barrancas, 850 m, Neuquén Province, Argentina, 22 Mar 1979, Mision Cientifica Danesa, genitalia slide 2881 HHN (ZMUC).

Paratypes.—Argentina. Neuquén Prov.:

 6δ , $3 \circ$, same data as for holotype, \circ genitalia slide 2882 HHN. Paratypes in ZMUC.

Ocala megajuxta Neunzig and Goodson, New SPECIES

Figs. 18, 62, 63, 83

Type locality.—Rio Limay, Arroyito, Neuquén Province, Argentina.

Diagnosis.—As indicated by the specific name, *megajuxta* has robust, lateral arms associated with the juxta that extend posteriorly well beyond the posterior margin of the inner plate of the juxta (Fig. 62). Only one other species of Ocala (dryadella Hulst) has been described; it occurs in North America (Florida). In O. dryadella the lateral arms of the juxta are small, reaching only as far posteriorly as the posterior margin of the inner plate. Additional differences in the male genitalia include: the outer margin of the cucullus concave in O. megajuxta and straight in O. dryadella; the aedoeagus spined in O. megajuxta and smooth in O. drvadella; the vinculum about as long as greatest width in O. megajuxta and not as long as greatest width in O. dryadella.

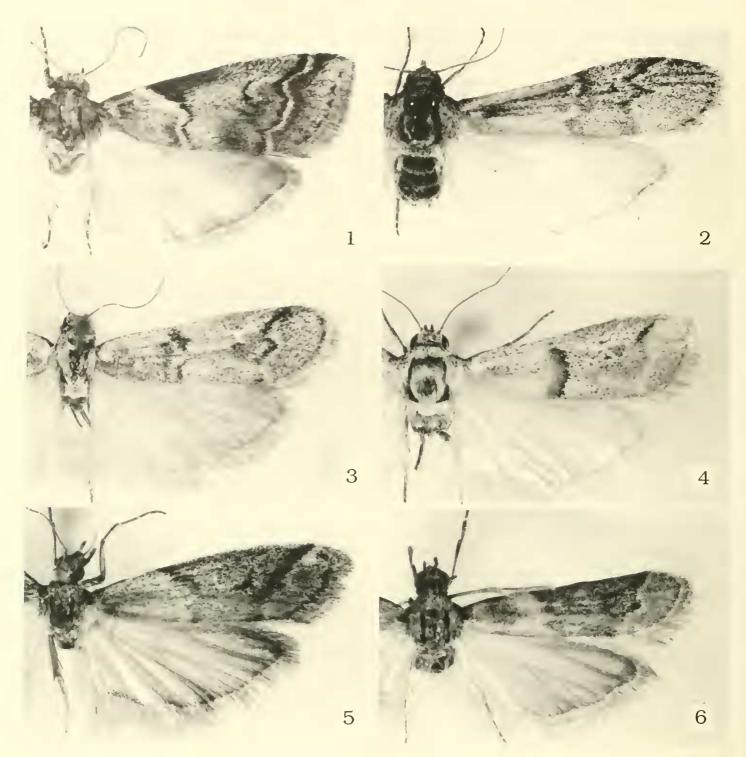
Description.—Length of forewing: 7.0–8.5 mm. Head with front and vertex brown and fuscous, rather heavily dusted with white; antenna of male with sinus and associated scale tuft near base of shaft, of female simple; labial palpus brown and fuscous, rather heavily dusted with white, porrect (second segment slightly oblique, third segment directed forward and slightly downward) in both sexes; maxillary palpus aigrettelike in male, in female simple, white. Thorax with dorsum and collar mostly pale brown or brownish white with some darker brown scales. Forewing with ground color fuscous, rather heavily dusted with white; basal patch of pale reddish brown in posterior half; antemedial line pale reddish brown, distinct in posterior half but not developed near costa, preceded in posterior half by black patch; postmedial line indistinct, white; on some specimens longitudinal streak of pale reddish brown in posterior half between transverse lines and extending into terminal area; discal spots usually rather distinct, black, separate; underside, of male, without costal fold or sex-scaling. Hindwing pale smoky fuscous, darker along veins and near costal and outer margins. Male abdominal segment 8 with pair of stout ventrolateral scale tufts and a lateral pair of eversible lobes bearing longer tufts of scales. Male genitalia (Figs. 62, 63) with uncus triangular; gnathos with well developed hooklike process; transtilla not developed; juxta platelike with rather long, robust, lateral lobes bearing many short setae; valva with transverse sclerotized ridge extending across base of cucullus; basal part of ridge with setiferous lobe; outer margin of cucullus slightly concave; aedoeagus very slender, needlelike, armed with rows of small, dentate spines in distal half; vinculum about as long as greatest width. Female genitalia (Fig. 83) with ductus bursae very slender in posterior half, inflated in anterior half; corpus bursae membranous, attached to ductus bursae near its middle, without signum; ductus seminalis arising from narrow posterior part of ductus bursae.

Distribution. – Collected in southern Neuquén and western Rio Negro Provinces. Holotype. – č – Rio Limay, Arroyito, Neuquén Province, Argentina, 22 Dec 1978, Mision Cientifica Danesa, genitalia slide 2923 HHN (ZMUC).

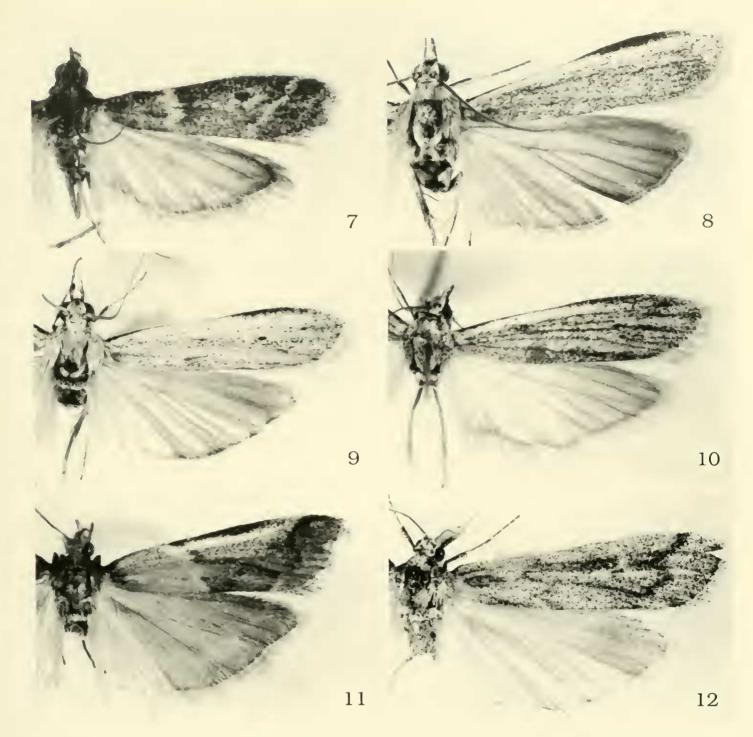
Paratypes. – Argentina. Neuquén Prov.: Lago Lacar, Pucara, 750 m, 5 δ , 3 Dec 1978, Mision Cientifica Danesa, genitalia slides 2928, 2944 HHN. Piedra del Aguila, 1 δ , 18 Nov 1978, 1 \circ , 19 Dec 1978, 1 \circ , 23 Dec 1978, Mision Cientifica Danesa, 2 \circ genitalia slides 2924, 2959 HHN. Rio Limay, Arroyito, 2 δ , 17 Dec 1978, Mision Cientifica Danesa, genitalia slide 2938 HHN. Rio Negro Prov.: San Carlos de Bariloche, Colonia Suiza, 880 m, 1 \circ , 11 Dec 1978, Mision Cientifica Danesa, genitalia slide 3003 HHN. Paratypes in ZMUC.

ACKNOWLEDGMENTS

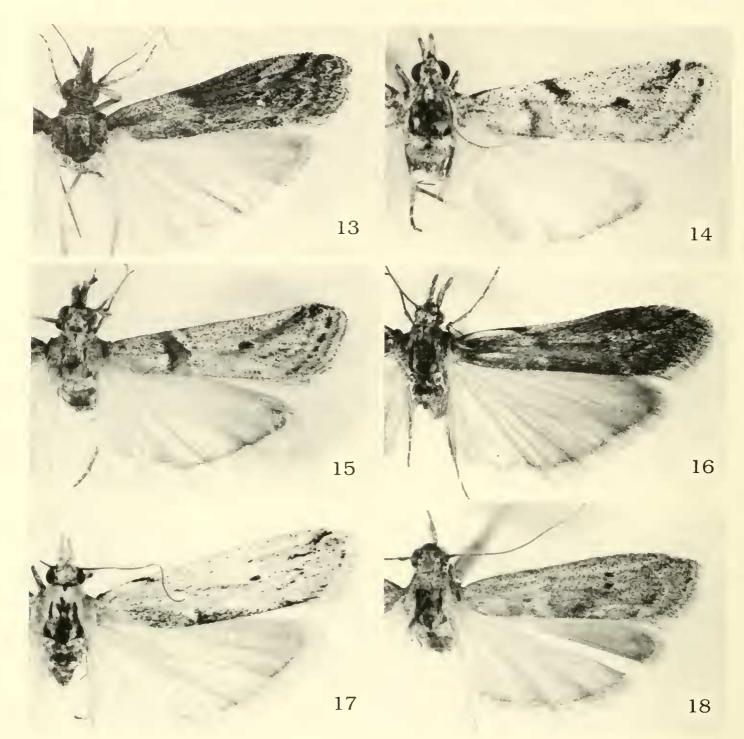
We are grateful to O. Karsholt for allowing us to study the southern South American phycitines in the collection of the Zoological Museum of the University of Copenhagen (ZMUC), and we thank R. L. Blinn, L. L. Deitz, M. H. Farrier, M. A. Solis and D. L. Stephan for critically reading and making suggestions for the improvement of the paper.



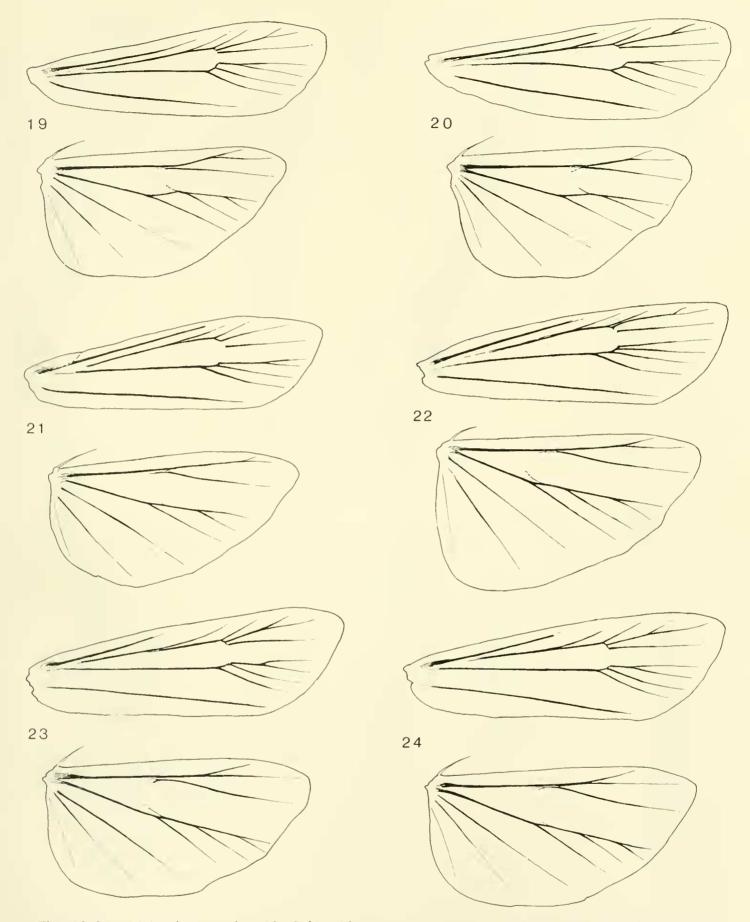
Figs. 1–6. Male adults. 1, *Ectomyelois austrella* n. sp., holotype (10.5 mm). 2, *Pseudocabima australis* n. sp., holotype (13.8 mm). 3, *Cabimoides patagoniensis* n. sp., holotype (9.7 mm). 4, *Apocabimoides neuquenensis* n. sp., holotype (7.6 mm). 5, *Inverina suizensis* n. sp., holotype (8.8 mm). 6, *Ephestiodes argentinus* n. sp., holotype (6.1 mm). (Length of forewing in parentheses.)



Figs. 7–12. Male adults. 7, *Erelieva steppeiana* n. sp., holotype (7.2 mm). 8, *Homoeosoma strongylogna-thosum* n. sp., holotype (11.2 mm). 9, *Homoeosoma eurygnathosum* n. sp., holotype (11.2 mm). 10, *Homoeosoma pauroaichmetes* n. sp., holotype (9.2 mm). 11, *Ohigginsia diversa* n. sp., holotype (11.2 mm). 12, *Ragonotia confluenciana* n. sp., holotype (15.5 mm). (Length of forewing in parentheses.)

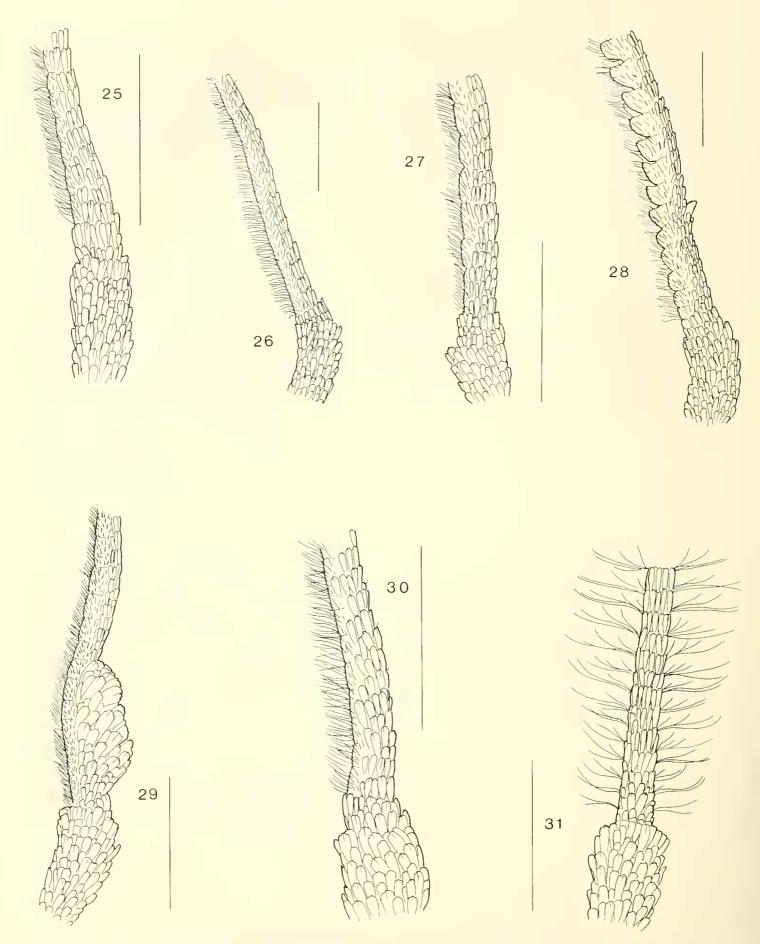


Figs. 13–18. Male adults. 13, *Passadena argentina* n. sp., holotype (10.1 mm). 14, *Pseudopassadena gentilii* n. sp., holotype (8.5 mm). 15, *Eupassadena karsholti* n. sp., holotype (8.5 mm). 16, *Honora nirihuauensis* n. sp., holotype (13.0 mm) 17, *Honora palliolella* n. sp., holotype (10.0 mm). 18, *Ocala megajuxta* n. sp., holotype (7.6 mm). (Length of forewing in parentheses.)

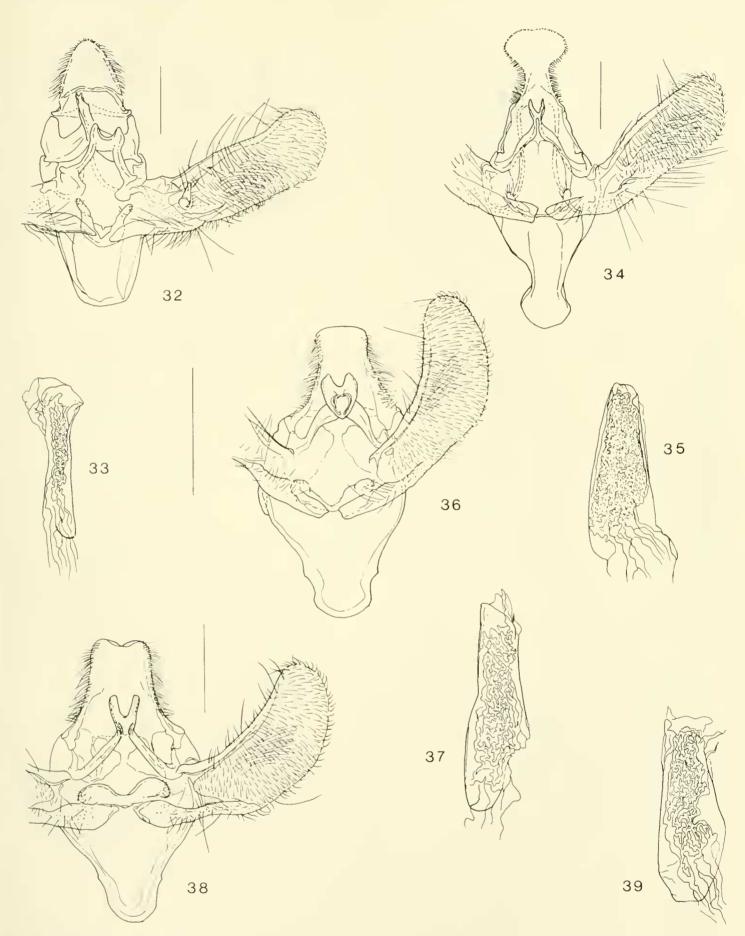


Figs. 19–24. Male wing venation. 19, *Cabimoides patagoniensis* n. sp. (11.0 mm). 20, *Apocabimoides neu-quenensis* n. sp. (7.5 mm). 21, *Inverina suizensis* n. sp. (8.0 mm). 22, *Ohigginsia diversa* n. sp. (11.9 mm). 23, *Pseudopassadena gentilii* n. sp. (8.5 mm). 24, *Eupassadena karsholti* n. sp. (8.2 mm). (Length of forewing in parentheses.)

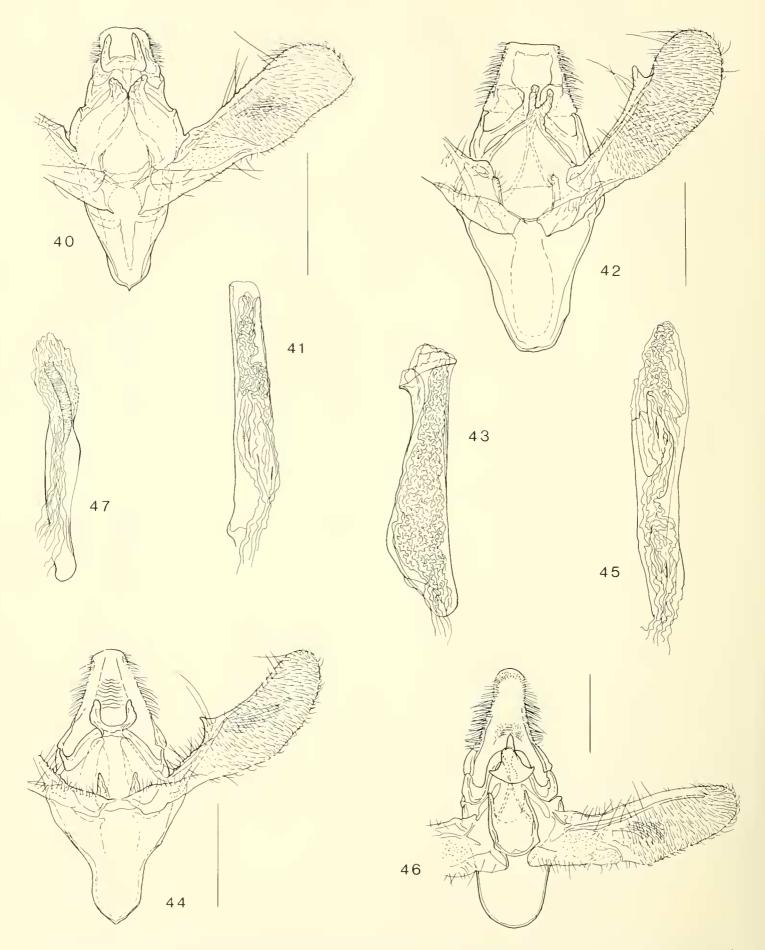
PROCEEDINGS OF THE ENTOMOLOGICAL SOCIETY OF WASHINGTON



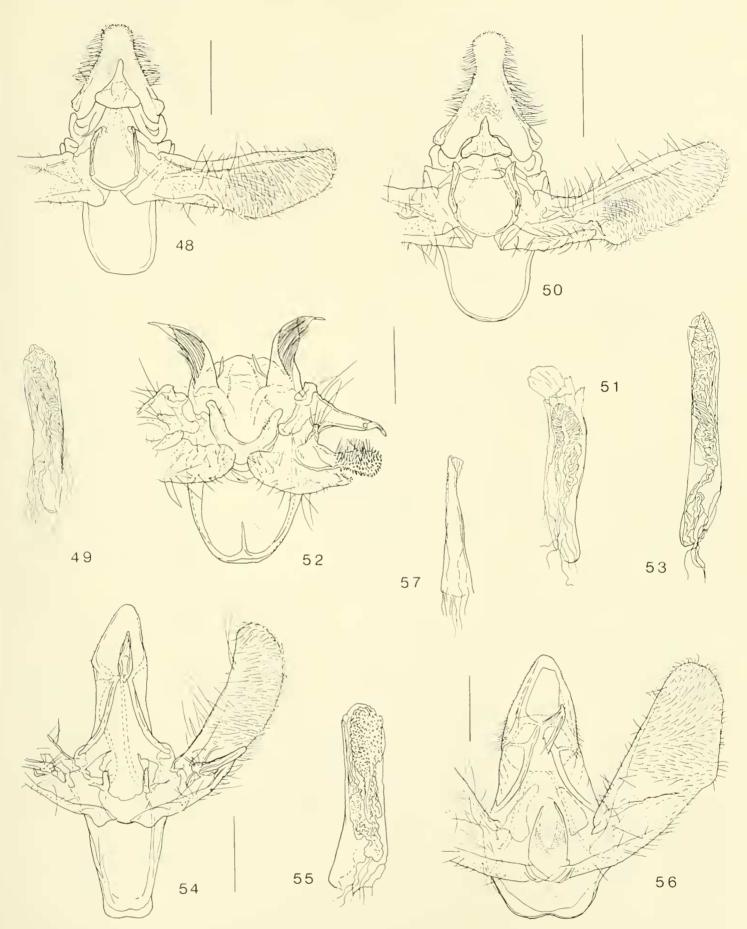
Figs. 25-31. Male antennae. 25, *Inverina suizensis* n. sp., posterior view of base. 26, *Pseudopassadena gentilii* n. sp., posterior view of base. 27, *Apocabimoides neuquenensis* n. sp., posterior view of base. 28, *Ohigginsia diversa* n. sp., posterior view of base. 29, *Eupassadena karsholti* n. sp., posterior view of base. 30, *Cabimoides patagoniensis* n. sp., posterior view of base. 31, *Ragonotia confluenciana* n. sp., posteromedial view of base. (All scale lengths 0.5 mm.)



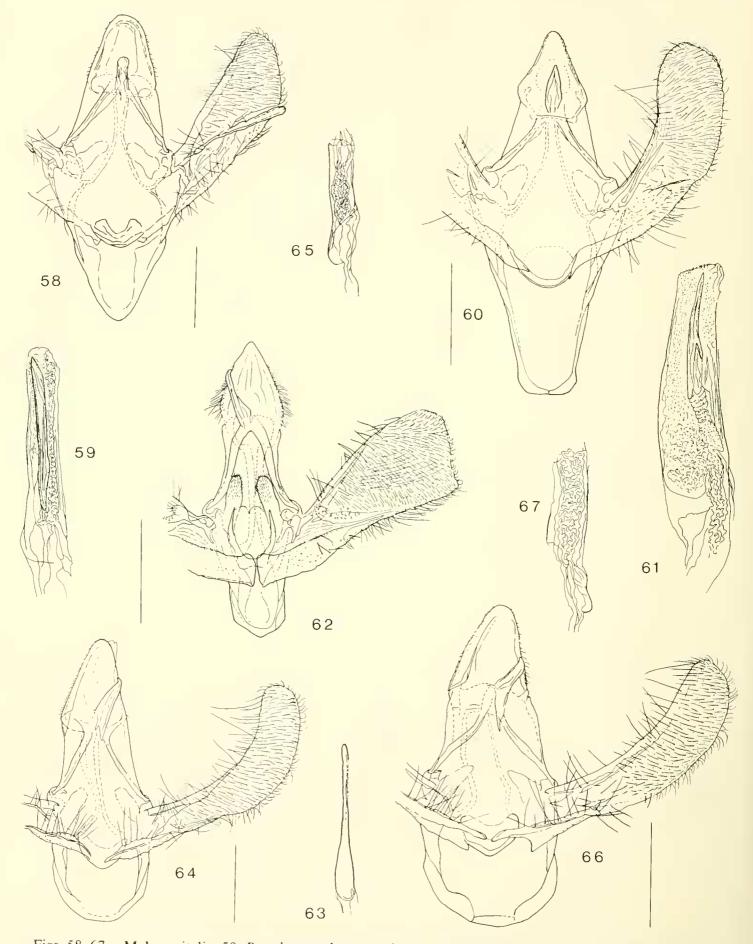
Figs. 32–39. Male genitalia. 32, *Ectomyelois austrella* n. sp., holotype, ventral view, aedoeagus removed. 33, aedoeagus. 34, *Pseudocabima australis* n. sp., holotype ventral view, aedoeagus removed. 35, aedoeagus. 36, *Apocabimoides neuquenensis* n. sp., holotype, ventral view, aedoeagus removed. 37, aedoeagus. 38, *Cabimoides patagoniensis* n. sp., holotype, ventral view, aedoeagus removed. 39, aedoeagus. (All scale lengths 0.5 mm.)



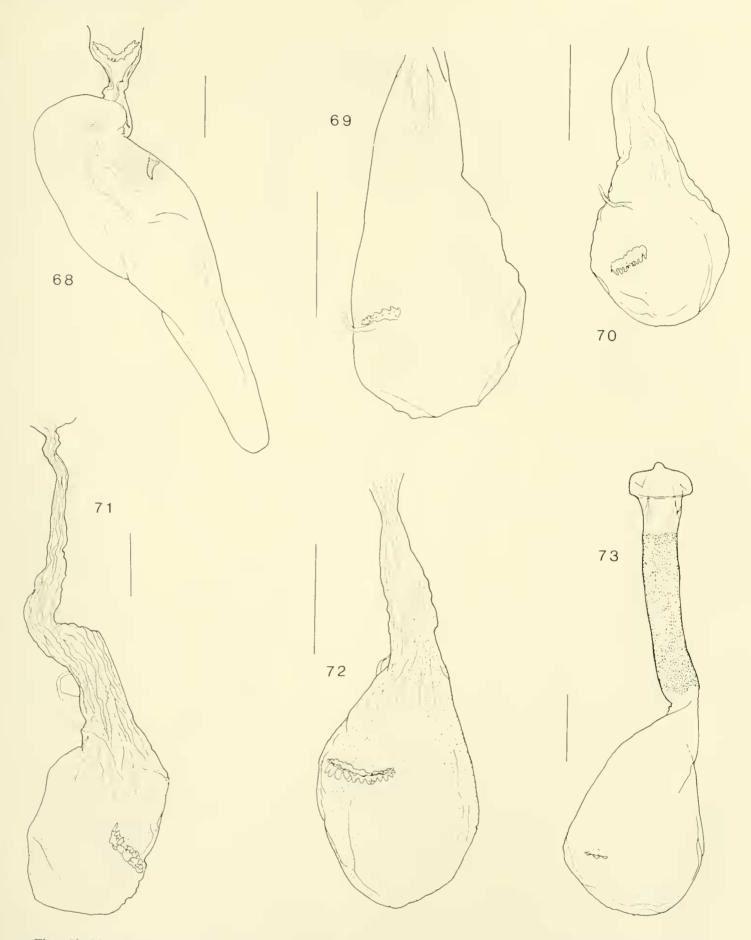
Figs. 40–47. Male genitalia. 40, *Ephestiodes argentinus* n. sp., holotype, ventral view, aedoeagus removed. 41, aedoeagus. 42, *Erelieva steppeiana* n. sp., holotype, ventral view, aedoeagus removed. 43, aedoeagus. 44, *Inverina suizensis* n. sp., holotype, ventral view, aedoeagus removed. 45, aedoeagus. 46, *Homoeosoma stron-gylognathosum* n. sp., holotype, ventral view, aedoeagus removed. 47, aedoeagus. (All scale lengths of 0.5 mm.)



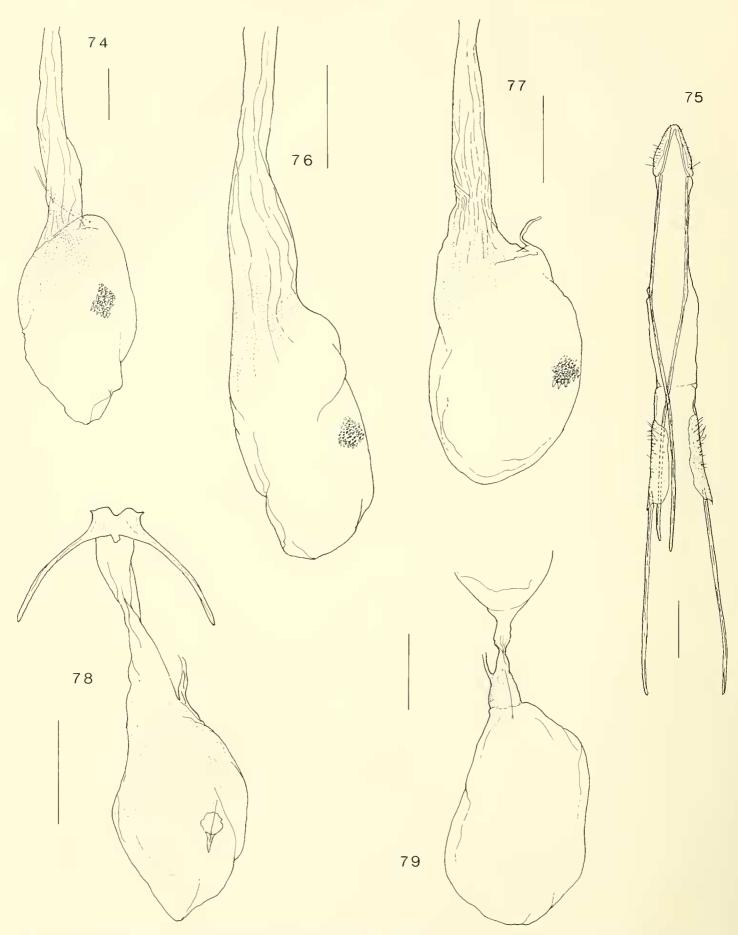
Figs. 48–57. Male genitalia. 48, *Homeosoma pauroaichmetes* n. sp., holotype, ventral view, aedoeagus removed. 49, aedoeagus. 50, *Homoeosoma eurygnathosum* n. sp., holotype, ventral view, aedoeagus removed. 51, aedoeagus. 52, *Ohigginsia diversa* n. sp., holotype, ventral view, aedoeagus removed. 53, aedoeagus. 54, *Passadena argentina* n. sp., holotype, ventral view, aedoeagus removed. 55, aedoeagus. 56, *Ragonotia confluenciana* n. sp., holotype, ventral view, aedoeagus removed. 57, aedoeagus. (All scale lengths 0.5 mm.)



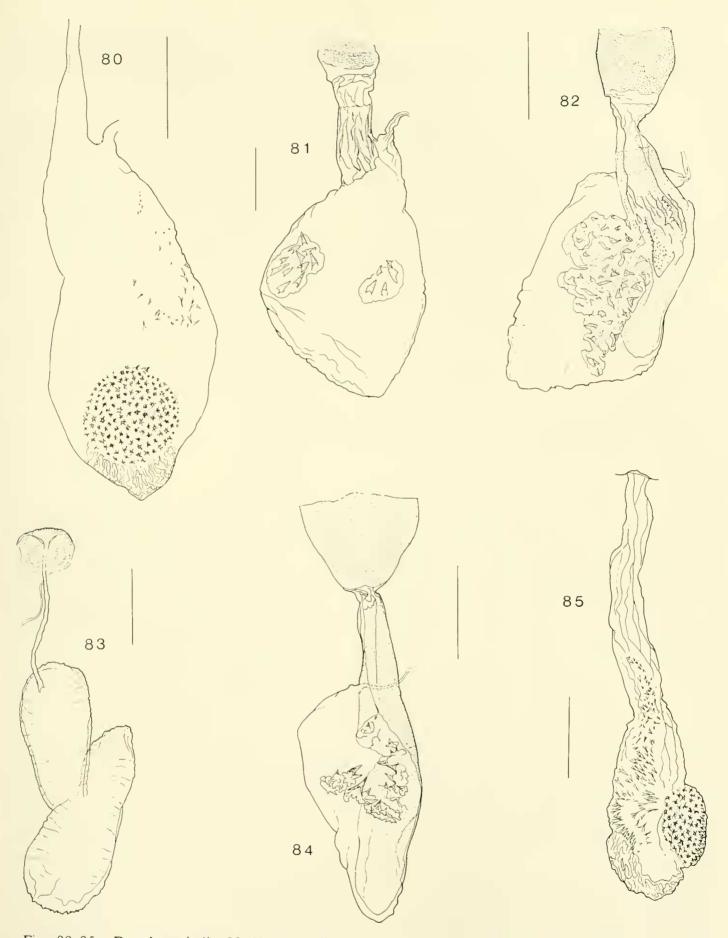
Figs. 58-67. Male genitalia. 58, *Pseudopassadena gentilii* n. sp., holotype, ventral view, aedoeagus removed. 59, aedoeagus. 60, *Eupassadena karsholti* n. sp., holotype, ventral view, aedoeagus removed. 61, aedoeagus. 62, *Ocala megajuxta* n. sp., holotype, ventral view, aedoeagus removed. 63, aedoeagus. 64, *Honora nirihuauensis* n. sp., holotype, ventral view, aedoeagus removed. 65, aedoeagus. 66, *Honora palliolella* n. sp., holotype, ventral view, aedoeagus removed. 67, aedoeagus. (All scale lengths 0.5 mm.)



Figs. 68–73. Female genitalia. 68, *Ectomyelois austrella* n. sp., ventral view, ductus bursae and corpus bursae. 69, *Inverina suizensis* n. sp., ventral view, ductus bursae, corpus bursae, and ductus seminalis (in part). 70, *Cabimoides patagoniensis* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 71, *Pseudocabima australis* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 72, *Apocabimoides neuquenensis* n. sp., ventral view, ductus bursae, corpus bursae, and ductus seminalis (in part). 72, *Apocabimoides neuquenensis* n. sp., ventral view, ductus bursae, corpus bursae, and ductus seminalis (in part). 73. *Ephestiodes argentinus* n. sp., ventral view, ductus bursae and corpus bursae. (All scale lengths 0.5 mm.)



Figs. 74–79. Female genitalia. 74, *Homoeosoma pauroaichmetes* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 75, *Homoeosoma strongylognathosum* n. sp., ventral view, papillae anales, apophyses, and sclerotized collar. 76, ventral view, ductus bursae and corpus bursae. 77, *Homoeosoma euryg-nathosum* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 78, *Ohigginsia diversa* n. sp., ventral view, apophyses anteriores, ductus bursae, corpus bursae and ductus seminalis (in part). 79, *Ragonotia confluenciana* n. sp., ventral view, ductus bursae, corpus bursae, and ductus seminalis (in part). (All scale lengths 0.5 mm.)



Figs. 80–85. Female genitalia. 80, *Honora palliolella* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 81, *Passadena argentina* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 82, *Eupassadena karsholti* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 83, *Ocala megajuxta* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 84, *Pseudopassadena gentilii* n. sp., ventral view, ductus bursae, corpus bursae and ductus seminalis (in part). 85, *Honora nirihuauensis* n. sp., ventral view, ductus bursae and corpus bursae and ductus seminalis (in part). 85, *Honora nirihuauensis* n. sp., ventral view, ductus bursae and corpus bursae. (All scale lengths 0.5 nm.)

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